



Seattle, WA • 18 April, 2006

## Preconference Session on Green Buildings and Healthcare

### **Conference Overview**

---

CleanMed is a comprehensive look at the Hospital Environment—inside and out, its challenges and its opportunities—from a sustainable, environmental health perspective. The main conference brings together diverse components of the healthcare industry, and supplies ideas, tools, information, and resources.

The pre-conference is integral to the main conference, and provides an advanced and in-depth educational program for environmental health and green building subjects.

### **Training Seminars**

---

Conference participants choose between two concurrent Pre-conference workshop seminars – a focused introduction to the Green Guide for Health Care and the Pilot projects, or an interactive Pilot project exchange session.

Architects, medical planners, related design consultants, professional engineers, manufacturers, building contractors, facility and environmental managers of healthcare facilities are encouraged to attend the pre-conference Green Building Workshop.

### **Green Building Highlights**

---

Together with the pre-conference Green Building Workshop, a dedicated Green Building Track within the main conference offers the following:

- Discussions centered on the confluence of healthy building operations and sustainable healthcare architecture.
- Concurrent panels and workshops on health-related issues, research topics, and healing environment design.
- A poster session and exhibit walkthrough of current sustainable healthcare projects from around the US and abroad.
- An introductory sustainable health care training session, including an overview of the Green Guide, strategies, and case study examples from the Pilot program.
- A preview of the next release of the Green Guide for Health Care (version 2.2) that features a focused Q&A session with the Green Guide Steering Committee.
- A green building materials exhibit hall.
- Resources, books, and guidance tools, including printed copies of the Green Guide.

# CleanMed 2006

Seattle, WA • 18 April, 2006

## Full-day Pre-Conference Workshop Agenda

---

**8:00 – 8:30**      **Registration**

**8:30 – 8:50**      **Welcome**

Chad Beebe, AIA, CFPS, Construction Review Services Staff, Washington State Department of Health

**8:50 – 9:30**      **Keynote**

Richard Beam, MBA Providence Health & Services

There will be two concurrent morning workshops (refer to details below). Please select morning Session A or B:

**9:45 – 12:00**      **Session A: Introduction to Sustainable Health Care Design \***

**Session B: Conversations with Green Guide Project Teams \***

**12:00 – 1:00**      **Lunch**

**1:15 – 2:30**      **Sustainability in Action: H2E Award Winning Case Studies \***

Hosted by Hospitals for a Healthy Environment

**2:45 – 3:45**      **Integrated Design and Operations for Improved Environmental Performance \***

Lorissa MacAllister, Progressive AE

John Ebers, Metropolitan Health Village

**4:00 – 5:30**      **Green Building Case Studies \***

Dell Children's Medical Center, Tom Snearey AIA Karlsberger Companies

The Center for Health and Healing, OHSU Andy Frichtl, PE

Closing: The Bhopal Clinic, Gary Cohen, Health Care Without Harm

\*Sessions marked are eligible for contact hours from the American Institute of Architects (AIA/CES) through CES Provider Northwest Energy Efficiency Alliance.

## Workshop Details

---

**Session A is general interest.** Faculty members introduce main concepts and tools integral to sustainable health care construction and operation, including an introduction to the Green Guide™. Short sessions highlight major sustainability topics – sites, energy, water, materials, and feature up-to-date information about successes and lessons-learned from early health care projects. Architects, engineers, medical planners, interior designers, hospital or health care system representatives who want to learn more about sustainable healthcare construction and/or operation are encouraged to participate.

**Session B is for active sustainable health care teams.** This track emphasizes peer-to-peer exchange between Pilot project or LEED® registrants. Faculty from the Green Guide Steering Committee will update participants on Version 2.2. Architects, engineers, medical planners, interior designers, hospital or health care system representatives actively engaged in sustainable construction and/or operation are encouraged to participate.

# CleanMed 2006

Seattle, WA • 18 April, 2006

## **CleanMed Faculty & Guest Speakers**

---

Faculty includes members of the Green Guide Steering Committee, select poster session exhibitors, and field experts from representative health organizations. The list below highlights a number of the speakers and facilitators for both the Pre-Conference Workshop and CleanMed.

## **Guest Speaker Bios**

---

### **Chad E. Beebe, AIA, CFPS, Washington State Department of Health**

Chad has over 14 years of architectural experience in the design and planning of health care facilities across the country, and five years of experience performing on-site fire and life safety inspections used in preparation for review of JCAHO accreditation and DOH compliance. He is a member of the American Institute of Architects (AIA), and the Health Care Section of the National Fire Protection Association (NFPA). He provides technical assistance in the design and function of Hospitals, Ambulatory Surgery Centers, Childbirth Centers, Critical Access Hospitals, Kidney Centers, and PACD Hospitals in the state of Washington.

### **Richard Beam MBA System Director, Energy Management Services, Providence Health & Services**

Richard has more than 27 years experience in energy related fields. His extensive background includes energy - mechanical design and applications engineering; construction and contract management, and electric utility account management.

He has been the Providence Energy Manager for the last ten years, working with their Facilities Directors, Utility Companies, and Energy Service Providers in Alaska, California, Oregon, and Washington (and soon Montana!). Richard holds degrees and certificates in mechanical engineering, communications, and business. He is honored to have received the Oregon Chapter of the Association of Professional Energy Managers, Energy Manager of the Year Award in 2003 and the Washington State Society of Healthcare Engineers Member of the Year Award in 2004.

### **Gary Cohen, Founder and Co-Executive Director, Health Care Without Harm; Executive Director, Environmental Health Fund, Boston, MA**

He is the co-author of *Fighting Toxics* (Island Press, 1990) and the groundbreaking report, "The U.S. Military's Toxics Legacy." He served for many years as the Executive Director of the National Toxics Campaign Fund and is a founder of the Military Toxics Project, which addresses the public health legacy of the U.S. military. He is a member of the International Advisory Board of the Sambhavna Clinic and Documentation Center in Bhopal, India, which provides free medical care to the survivors of the Union Carbide gas disaster in Bhopal. He has been working on environmental health issues for nineteen years and has published numerous articles on environmental health issues in the United States and India. He is also a program consultant to the Panta Rhea Foundation and the John Merck Fund.

### **John Ebers, Sustainable Practices Coordinator, Metropolitan Hospital, Grand Rapids, MI**

Mr. Ebers is a graduate of Aquinas College, where his studies focused on Sustainable Business Management, Political Science, and Environmental Studies. He has over five years experience in research and development of sustainable business practices. Since the spring of 2003, he has worked to develop Metro's approach to incorporate sustainability into its corporate philosophy. As a LEED Accredited Professional of the U.S. Green Building Council, Mr. Ebers assists with project goals for the Metro Health Village as they pertain to LEED certification.

# CleanMed 2006

Seattle, WA • 18 April, 2006

## **Andy Frichtl, Interface Engineering, PE Principal, Interface Engineering, Portland, OR**

The recipient of numerous achievement awards, Andy is well known in the world of architecture and infrastructure as a leader in sustainable design. Andy specializes in energy efficiency and conservation, and uses energy modeling and energy analysis studies as a key component of solid sustainable design that is cost effective as well. He has extensive experience in designing mechanical, electrical and architectural systems that offer surprising payback timeframes. As a Principal, Project Manager and Team Leader, he is responsible for the design of mechanical systems and overall project management. Andy began his career at Interface in 1988. He is a member of ASHRAE and a registered Professional Engineer in 11 states.

“We are moving into the creative economy, where we have to find ways to do more with less. This can be accomplished by integrating building features to serve multiple purposes and creative solutions, which save energy and water with less up-front costs. This is what fascinates me. This is where my passion lies.”

## **Judith Heerwagen PhD, JH Heerwagen & Associates, Seattle, WA**

Dr. Heerwagen is a psychologist whose research and writing have focused on sustainability, biophilia, and the psychosocial value of place.

Prior to starting her own business, Dr. Heerwagen was a senior research scientist at the Pacific Northwest National Laboratory and a research faculty member at the University of Washington, College of Architecture and Urban Planning. Her work at both PNNL and the University of Washington focused on the human factors of sustainable design. She is currently working with Dr. Stephen Kellert of Yale University on the development of a new approach to design which integrates sustainability and biophilia. The Yale project includes research on the impacts of biophilic design on occupant health, well being, and cognitive functioning.

Dr. Heerwagen has been an invited participant at conferences and at national meetings sponsored by the National Academy of Sciences, the National Institute of Medicine, the General Services Administration, and the American Institute of Architects and she has lectured widely on environmental human factors. She is the author or coauthor of numerous articles and book chapters on workplace, creativity, biophilia, and habitability. She was recently selected as a 2005 environmental champion by Interiors and Sources Magazine.

## **Alexis Karolides, Rocky Mountain Institute, Snowmass, CO**

Alexis is a Principal with Rocky Mountain Institute's Built Environment team, a registered architect with previous experience in commercial, institutional, and industrial architecture. Her primary research areas at RMI include healthy building design, especially applied to health care facilities, and biologically-inspired design—she is working with the Biomimicry Guild on a database linking human design challenges to solutions found in nature. Ms. Karolides's consulting projects at RMI have included a retrofit project at Hickam Air Force Base to set a new “green” standard for the Air Force, a prototype energy-efficient supermarket for Stop & Shop, a sustainable design and energy plan for Madison, WI, environmental consulting for the Wildlife Conservation Society, and campus-wide energy planning and building retrofit strategies for Berea College. She has also provided educational seminars and integrated design workshops for communities, businesses, and institutions, including Shell, Perrier, the Departments of Environmental Protection and Urban Planning in Tianjin, China, and the cities of Milwaukee, Cincinnati, Minneapolis and Pittsburgh. Ms. Karolides is a frequent speaker at national conferences and guest lecturer at colleges and universities; she was the sole representative for the United States at the First International Symposium on Urban Eco Sustainability in Padua, Italy.

# CleanMed 2006

Seattle, WA • 18 April, 2006

## **Lisa Fay Matthiessen, AIA Assoc. Principal, Davis Langdon, Santa Monica, CA**

Lisa Matthiessen has extensive experience in design and construction, with an emphasis in sustainable design. Ms. Matthiessen directs Davis Langdon's Sustainable Design department, which provides full sustainable design and LEED services for major institutional projects. Lisa co-authored "Examining the Cost of Green", an analysis of the costs associated with building LEED projects which has been presented at many venues, including the AIA National Conference 2004 and Greenbuild 2004. Davis Langdon is now working on a study of the costs of greening healthcare.

Lisa was the project architect for the greening of Bren Hall, the first platinum LEED project in California. She was responsible for design analysis, development of greening measures complete with budget and schedule implications, implementation of selected measures, and LEED documentation. As the Director of Architectural Projects at the Natural History Museum of Los Angeles, Lisa was responsible for project planning, including open architectural competition for design architect, creation of master budget and schedule, team formation and contract negotiations, preparation of documents for use in design and management of the master plan process for the project, which is targeting LEED Platinum. Current clients include Cooper Union, Anchorage Art Museum, City of West Hollywood, Los Angeles Valley College, Loyola Marymount University, Pomerado Hospital, CSUS Stanislaus, Ohlone Community College, Art Museum of Western Virginia, and the National Park Service. As a member of the USGBC's LEED faculty, Lisa teaches LEED NC Technical Review, LEED NC In Practice, LEED for Existing Buildings, and LEED Costs and Returns.

## **Bill Ravanese, Regional Director, Health Care Without Harm, Long Meadow, MA**

Bill Ravanese is in his ninth year as Boston Regional Director for Health Care Without Harm. He has background in both public health and photojournalism, holding a Master's degree in each field. His HCWH work centers on pollution prevention and green building in the health care sector. He is the editor of the monograph, "Breath Taken: The Landscape and Biography of Asbestos."

## **Kurt Rockstroh, FAIA President/CEO, Steffian Bradley Architects, Boston, MA**

Kurt Rockstroh is a healthcare architect with more than 30 years of experience in the master planning and design of hospitals, ambulatory care facilities and private institutions for research and teaching. He has been involved in the planning and design of more than 400 built healthcare projects. Kurt joined Steffian Bradley Architects in 1977 and was invited to become a Partner at SBA in 1981. He became President/CEO in 1996.

Over the last 25 years Kurt has spoken at more than 100 conferences in the US and UK on a range of topics related to planning and design of ambulatory and acute care facilities, as well as teaching at the Boston Architectural Center and Harvard University Graduate School of Design Continuing Education Programs.

## **Thomas L. Snearey, AIA, Senior Vice President, Karlsberger Companies, Columbus, OH**

Tom is a recognized leader in the design of healthcare environments. Tom is a Senior Project Architect/Designer for Karlsberger and has 22 years of experience. A hallmark of Tom's skills is the management of large, complex healthcare projects. His collaborative approach depends upon his balanced appreciation of great design and superb project management skills. Tom may be described as an "integrator," orchestrating the many activities that take place throughout the life of a healthcare project by providing a view of the future and communicating that to our clients and the entire project team.

Tom is currently managing the design of a brand new, \$80 million community hospital for the Lake Heath System, in Painesville, Ohio, and the new, \$105 million replacement hospital for the Dell Children's Medical Center of Central Texas, the first hospital in the U.S. that striving for platinum-level LEED certification. He has a Bachelor of Architecture from the University of Cincinnati and has been with Karlsberger since 1984.

# CleanMed 2006

Seattle, WA • 18 April, 2006

## **Jan D. Stensland M.S., IIDA, LEED AP, Strategic Planning and Design for National Facilities Services at Kaiser Permanente, Oakland, CA**

Jan has responsibilities related to the National Purchasing Agreements, “greening” building standards, and researching new sustainable materials and technologies. Her Bachelor of Interior Architecture is from the University of Oregon and her Master’s of Science in Human Environment Relations/Applied Research is from Cornell University.

Jan has many years of experience in green building and design. She is an “IDEA Champion” for the Northern California Chapter of IIDA, is a member of the USGBC’s Professional Development Committee, and an advisor to the USGBC’s Technical Advisory Group on Indoor Environmental Quality. She is also a LEED-CI (Commercial Interiors) Faculty Member. Her work has been described as “Mother Earth Meets Ms. Science” in that she brings a practical, common sense approach based on sound scientific research to her passion for healthy buildings.

## **Green Guide Steering Committee Bios**

---

### **Robin Guenther, FAIA, Principal, Guenther 5 Architects, New York**

Robin is the principal of Guenther 5 Architects, a 20 person New York City firm with extensive experience in health care design. Her projects have received national design awards and have been published in Architectural Review, Metropolis, Health Care Design and Interior Design.

Guenther 5 Architects is responsible for the Discovery Health Center, a LEED certified medical building that received the first annual ASHE Sustainable Design Award in 2004. She served on the 2006 AIA Guidelines for Healthcare Construction Revision Committee, is a Co-Coordinator of the Green Guide for Health Care, and is now on the LEED® for Healthcare Application Guide Committee. In 2004, she was named an Environmental Champion by Interiors and Sources magazine, and last year received the 2005 Changemaker Award from the Center for Health Design.

### **Steven Guttman, PE, Principal, Guttman & Blaevoet, Consulting Engineers, San Francisco, CA**

Steven has specialized in mechanical design for healthcare facilities since 1986. Continuing the firm’s 50-year leadership in sustainable design for healthcare facilities in California, he is serving as principal on a new 120-bed, 85,000 sf geropsychiatric hospital for the Veterans Administration, which is the first VA hospital in the U.S. that intends to achieve LEED certification. He is also providing sustainable design and energy consulting services for a new 25-bed replacement hospital in rural California, which may be the first rural hospital in the U.S. that is built to sustainable design standards.

Steve serves on the Core Committee of LEED for Healthcare, currently under development by the USGBC. As a member of the Steering Committee of the Green Guide for Health Care, he focuses on energy and water issues. Steve presented at the ASHE annual conference in 2004 on the Green Guide for Health Care, and at the ASHE PD&C conference in 2005 on Energy Conservation Applications in Healthcare Facilities.

### **Adele Houghton, Associate AIA, LEED® AP, Pilot Project Coordinator, Green Guide for Health Care, Austin, TX**

Trained as an architect, Adele’s background includes acting as an in-house green building consultant at Kirksey, a large architecture firm in Houston, Texas; policy and graphic design work at the Center for Maximum Potential Building Systems in Austin, Texas; and an internship in Accessibility concerns for sustainable development initiatives at the United Nations in New York. Adele manages the day to day business of the Green Guide for Health Care. She is also responsible for gathering and analyzing data from the Pilot projects that informs the development of the Version 2.2 document.

### **Tom Lent, Healthy Building Network, Berkeley, CA**

Tom Lent has over 25 years of experience with energy and environmental issues, in a wide range of venues from architecture to technical field research to project implementation to policy analysis and advocacy. Tom currently coordinates the Building Green Healthcare Workgroup for HBN and Health Care Without Harm, and works on a variety

# CleanMed 2006

Seattle, WA • 18 April, 2006

of related projects such as developing green construction policies with the City of San Francisco, helping green Kaiser Permanente's construction and purchasing specifications. Tom is a co-coordinator of the Green Guide for Health Care.

## **Lorissa K. MacAllister, Assoc AIA, Progressive AE, Grand Rapids, MI**

Lorissa joined Progressive in 2003 as a Healthcare Studio Leader. She most recently served as the healthcare designer, planner, and programmer for a national architectural firm where she provided her expertise on several hospital master plans and hospital expansion projects. Lorissa has presented at the 2004 ASHE International Federal of Hospital Engineering, the 2003 USGBC Greenbuild, and the 2002 and 2003 Construction Owners Association of America. Other affiliations include AIA Sustainable Design Award Grand Valley Chapter Chair, USGBC Organizing Group Committee, West Michigan Sustainable Business Forum, Economic Club of Grand Rapids, Cascade Charter Township Planning Commission, Gilda's Club of Grand Rapids Board of Directors, Cascade Engineering Board of Directors, Keller Foundation Vice President.

## **Raymond Michael Pradinuk, B.A. B.Arch. MSc.Arch. MAIBC, Sustainable Design Leader, Stantec Architecture Limited, Vancouver, BC**

Ray was born and raised in Regina, Saskatchewan. He received a Bachelor of Architecture from the University of British Columbia and a Master of Science in Architecture from the Bartlett School of Architecture, University College, London.

The focus of Ray's work has been on the social, psychological implications of complex urban and architectural spatial arrangements and on sustainable design in healthcare. Ray studied with Space Syntax theory with Professor Bill Hillier, and has since applied the theory and analytical methods of Space Syntax to urban and architectural planning and design problems.

Recent projects in health care include the Sarnia General Hospital Capital Redevelopment Project, Vancouver General Hospital Tower Completion Project, the Children's Health Centre addition at Surrey Memorial Hospital, and the Neonatal Intensive Care Unit at the Royal Alexandra Hospital in Edmonton Alberta. Ray marvels at the dedication that health care providers bring to their work, and at the multiple systems of communication through which new knowledge is shared within the community of care.

## **Scott Slotterback, Senior Project Manager, Kaiser Permanente, National Facilities Services, Oakland CA**

Scott is the Project Manager responsible for the design review of every Kaiser Permanente hospital, laboratory, and administrative building project in the United States that is valued above \$10 million. He is actively involved in 20 major new hospital or replacement hospital projects, as well as numerous hospital expansions.

Throughout his 25-year career he has been an advocate of environmentally responsible design. In the early 1980's, working for the Institute for the Human Environment, he supervised a team of researchers investigating the health impact of the office environment on workers. He co-authored Kaiser Permanente's Eco-Toolkit.

Prior to joining Kaiser Permanente, Scott worked for several national architecture and planning firms, including NBBJ and Anshen + Allen. He studied architecture and planning at the Rhode Island School of Design, where he earned his BFA in Architecture and Bachelor of Architecture degrees. He also received a Master of Science in Management from Durham University in England.

## **Jerry Smith, ASLA, Senior Landscape Architect, Karlsberger Companies, Columbus, OH**

Jerry Smith is the Senior Landscape Architect for Karlsberger Companies, an integrated healthcare design firm based in Columbus, Ohio. Holding degrees in Botany, Architecture and Landscape Architecture and 20 years experience with healthcare design firms in Boston and the Midwest, Smith leads the firm's landscape architecture initiatives in sustainable and evidence-based design. Smith is a member of the Steering Committee of the Green Guide for Health Care, the Environmental Standards Council of the Center for Health Design, the Board of Directors of the Hollandia Botanical Garden, the Faculty of the School of the Chicago Botanic Garden Healthcare Garden Design Certificate Program, and a lecturer for the Knowlton School of Architecture at The Ohio State University.

# CleanMed 2006

Seattle, WA • 18 April, 2006

## **Walt Vernon, PE, President, Mazzetti Associates, San Francisco, CA**

Walt Vernon has been involved in the design and construction of health care facilities for all of his 20-year career. He has designed health care projects for many kinds of facilities including acute care hospitals, medical office buildings, and nursing homes. He has designed health care facilities in 9 states and the district of Columbia. He has designed health care facilities for chains, for independent owners, for for-profit organizations and not-for-profit organizations, for state governments, city governments, and the federal government.

As a result of his experience and expertise, he currently serves as a Principal Member for the electrical Technical Committee for NFPA 99 – the Health Care Code. He co-chairs the ANSI/IEEE White Book – National Standard for the design of electrical systems in healthcare buildings. He is one of the electrical engineers on the AIA Guidelines Revision committee. He is a former Principal Member of the Health Care Committee for the National Electrical Code. He is the electrical engineer for the California Hospital Safety Board. He has published numerous articles in various journals regarding electrical engineering for healthcare facilities.

His interest in Green Buildings arose from his interest in incorporating the best possible energy solutions into health care buildings, something he had pursued for years. As a result of this work, Kaiser Permanente asked him to work with them three years ago on their Environmental Stewardship Committee. Walt has worked with them to study and to create a number of standards to incorporate various green measures into their facilities. He has developed a wide range of Green Building expertise, and has consulted to several design teams as a “Green Health-Care Building Consultant.”

## **Gail Vittori, Co-Director Center for Maximum Potential Building Systems, Austin, TX**

Gail Vittori, LEED AP, is Co-Director of the Center for Maximum Potential Building Systems, a non-profit design firm established in 1975 dedicated to sustainable planning, design and demonstration where she has worked since 1979. Since 2000, Ms. Vittori has been a catalyst for several national initiatives focused on green health care facilities, including collaborating on the development of the American Society of Healthcare Engineering’s (ASHE) Green Healthcare Construction Guidance Statement, the first green guidance document specifically for the healthcare sector, and the national initiative for Green Guide for Health Care. Current projects include serving as LEED® consultant for the 500,000 square foot Dell Central Texas Children’s Medical Center, Co-Coordinator of the Green Guide for Health Care, and Chair of the LEED-Healthcare Application Guide core committee.

Ms. Vittori was a Loeb Fellow at Harvard University’s Graduate School of Design from 1998-1999, and attended the University of Massachusetts at Amherst where she studied economics. She presently serves on the U.S. Green Building Council’s Board of Directors, serves on the Advisory Boards of Environmental Building News and Natural Home magazine, and collaborates with Health Care Without Harm and the Healthy Building Network on numerous national environmental health initiatives. In 2002 she was a recipient of a Presidential Award for Leadership in Federal Energy Management recognizing her work on the Pentagon Renovation Program.