

Medical Design Forum:

AIA SEATTLE/AHP MEDICAL FORUM | FEBRUARY 9 & 10, 2012 | PSE Bellevue, WA

PROGRAM: THURSDAY, FEBRUARY 9, 2012*

8.15-9 am **REGISTRATION** and Continental breakfast

9-9.20 am **WELCOME**

Karoline Vass, Program Director, AIA Seattle

R. David Frum, AIA, Clark/Kjos and Chair, AIA Seattle Medical Forum Committee

9.20-11am **MORNING SESSION 1**

On a High Wire: Lessons Learned in Design, Operations, and Performance

Assessment of a LEED Platinum Healthcare Building

Dr. Ihab M.K. Elzeyadi, FEIA, LEED^{AP},

Department of Architecture, University of Oregon, USA

The Oregon Health and Science University (OHSU), Center for Health and Healing (CHH) building in Portland, Oregon, is the first LEED Platinum certified health care facility in the country. As an internationally recognized project among the urban landscape, the building sets new standards in the design industry. Although a number of publications have focused on the building's design innovations, none have systematically analyzed the impacts of the different sustainable strategies employed on the building operation, energy use, as well as occupants comfort and well-being. This session intends to fill this current knowledge gap by providing a comprehensive analysis of the building systems based on their isolated as well as their synergetic performance. The presentation will provide building designers and owners a clear vision of the impact of these strategies on the triple bottom line of people, planet, and profit. It will also provide evidence-based design guidelines for the application of these strategies in green buildings of the future.

11am-noon **MORNING SESSION 2**

Daniel Friedman, FAIA

Dean of the College of Built Environments, University of Washington

Emerging discourse seeks points of convergence between public health and architecture that will effectively integrate the composition of built environments with the science behind public health, well-being, and sustainability. Not just minimum standards, but also aspirational values bear on our exploration of this topic. Research clearly links the design of built environments to physical activity, which in turn influences obesity, diabetes, and other lifestyle diseases. If emerging research can establish deeper connections between built environments, health, and well-being, what are the implications for conventional standards of "design excellence"?

12-1 pm **LUNCH**

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1- 2.15 pm

AFTERNOON SESSION 1

The Research-Based Healthcare Design Practice: What does it mean, what progress has been made, and what does the future look like?

Tom Clark

Principal, Clark/Kjos Architects

Architects who want to engage in available research to inform their work today have difficulty in locating or deciphering useful knowledge that goes beyond the basic 'healing environment' and 'patient satisfaction' and a few safety-oriented studies. Architects today seek evidence related to design strategies that make a difference in patient outcomes, staff effectiveness and efficiency, new health reform practice models and patient and staff safety. This presentation will show how the evidence-based design movement is rapidly evolving to increase rigor and topical breadth to enable architects design more relevant healthcare facilities. It will provide an overview of relevant research being done currently, research being advocated, and most importantly, emerging tools to make knowledge and data accessible to busy practicing healthcare architects.

2.15-2.30 pm

BREAK

2.30-3.45 pm

AFTERNOON SESSION 2

LEAN - Concepts and Application in Healthcare

John Nowak, Performance Improvement Officer, Jefferson Healthcare

In this presentation we'll review examples from Jefferson Healthcare, a critical access hospital that owns and operates six clinics. Included in the presentation will be 5S, RPI, RPD, A3 DMS and ACT. Special attention will be given to issue of workspace design and the effects designs have on flow. In 2007, Jefferson Healthcare adopted the Toyota Production System as a method to improve quality and reduce costs by eliminating waste. During the four years Jefferson Healthcare has been using lean methods, it has conducted more than 100 improvement events, developed a daily management system, and installed an A3 process improvement system. Included in the Lean work done by Jefferson Healthcare is a Rapid Process Design in our laboratory. This design process involved staff in designing a lab space that reduced waste and improved flow. A review of this process will be presented.

3.45-5 pm

AFTERNOON SESSION 3

Duane Jonlin, Energy Code and Conservation Advisor, Seattle Dept of Planning and Development

Contemporary hospitals in Scandinavia, with climates similar to Seattle or Vancouver, operate on a third or a quarter of the energy used by most new Pacific Northwest hospitals. Another hospital will open in Stockholm next year, in a climate more like

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Juneau's, projected to run on a *fifth* of the total energy of our code compliant hospitals. These hospitals typically provide plentiful daylight and operable windows in virtually all of their spaces, ventilation rates that meet or exceed US codes, and construction costs that closely align with local hospital projects. In this presentation we will consider the factors that contribute to this remarkable difference in energy use, and the changes that would be required in our own practice to approach this level of performance.

5-7pm

RECEPTION at Mulvanny G2
1110 112th Avenue NE
Suite 500 (WEST Building)
Bellevue, WA 98004

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8.30 -9 am **REGISTRATION** and Continental breakfast

9-9.10 am **WELCOME**

9.20-11am **KEYNOTE SPEAKER**

Mardelle Shepley, Professor of Architecture at Texas A&M

Evidence-based design has been a growing trend in institutional design, particularly with regard to healthcare environments. Considerable debate has taken place regarding the role this fledgling science can play in the creation of the built environment. This presentation will serve as a primer for designers seeking to understand the meaning and implications of evidence-based design as well as provide advanced techniques for the understanding and use of design research. Participants will:

1. Obtain a thorough understanding of the definition of evidence-based design.
2. Understand the usefulness and limitations of research in design
3. Become acquainted with techniques for evaluating the quality of design research.
4. Understand the impact of evidence-based design on return on investment.

These topics will be addressed in the context of practitioner-focused facility evaluation (PFE). Facility evaluation will be defined relative to other types of design research and examples of the types of facility evaluations will be provided. The presenter will discuss the roles of evaluation team members and describe the contents of a sample PFE.

11am-noon **MORNING SESSION 1**

Healthcare Public Space and the Power of Design

Phil Duff AIA, Principal, NBBJ

Jacob Simons, Associate, NBBJ

Healthcare public spaces serve as the conduit and organizational hierarchy of all of the spaces within a health care facility. Public space metaphorically and practically is the “spirit” of a hospital or clinic’s circulatory system. It brings life to all the armatures of space and place.

Public spaces hold a rich and important place in architecture that can inform healthcare planning. Additionally, hospital public space is the richest opportunity to holistically weave the personality and culture of the institution to new facilities. This session identifies different planning typologies for healthcare public space based on architectural precedents, and illustrates the different needs and functions of each of those spaces.

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12-1.30 pm **LUNCH and AFTERNOON SESSION 1 (Project Case Study Team)**

The multi-disciplinary design team will present a case study of MultiCare Good Samaritan Hospital. This new patient care tower reflects the client's philosophy to put the patient and family at the center of care. It drove the building's architecture, operational structuring and interior design. The design team was highly motivated to find new ways to help people successfully navigate a complex system within an inspiring environment with simplified access, an emphasis on natural light, and four therapeutic gardens. The hilltop tower effectively expresses the new organization's larger 'regional medical center' status, yet is designed to work within the scale of its neighborhood. The project was completed in 2011.

1.30 – 5pm **ON SITE BUILDING TOUR**

MultiCare Good Samaritan Hospital, Puyallup (transportation provided, rsvp required)

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Speaker Bios:



Tom Clark is a founding principal of Clark/Kjos Architects, a firm dedicated exclusively to health care architecture, in Seattle and Portland. He heads the Healthcare Workplace Research Group, the research arm of Clark/Kjos Architects. His design and planning work has received numerous national and regional design awards from The American Institute of Architects, Modern Healthcare, The Center for Health Design, and H.U.D. He is currently co-chair of the Research Committee of the AIA Academy of Architecture for Health; and past chair of the Architecture for Health Panel. He has presented at Health Design conferences, ASHE's PDC conference, and to California Healthcare Foundation conferences. Tom received his education from the University of Cincinnati and the Architectural Association in London. Tom has taught and/or participated as professional advisor in University design studios at University of Oregon, Portland State University, University of Washington and Washington State University.



Phil Duff joined NBBJ in 1999 to focus exclusively on healthcare projects. He has over 24 years of experience in healthcare design. He is committed to challenging the status quo in the delivery of healthcare projects and adapting the design process to deliver projects in an ever changing environment. His goal as a project manager is to bring out the best in every team member and facilitate the success of the team, their partners, and the client in ways that reverberate into their lives. Phil is committed to architects volunteering more, getting their hands dirty, and playing a greater role in personally and actively reducing our impact on the planet



Ihab M.K. Elzeyadi, Ph.D., FEIA, LEED^{AP} is an associate professor of architecture and the director of High Performance Environments laboratory (HiPE) at the School of Architecture & Allied Arts, University of Oregon. Professor Elzeyadi has been engaged in the design, construction, and research of high-performance buildings for more than 20 years. He has conducted grant-supported research on the relationship between people and buildings including daylighting systems effects on health, productivity, and other outcomes as they relate to sustainable design strategies. His expertise includes building performance assessment and metrics; integrated design and delivery; indoor environmental quality; as well as environmental impacts of buildings on human performance and health. He is currently directing working on a number of studies investigating the biophilic effect of the built environment on occupants' health and well-being. Elzeyadi is the president of the Society of Building Science Educators, an appointed member to the USGBC Research Advisory Committee, Chair of USGBC, Thought and Leadership in Research working group, and a member of the University of Oregon Sustainability Council.

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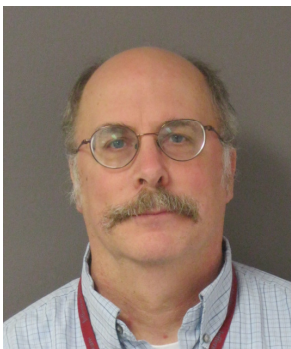
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Daniel Friedman is dean of the College of Built Environments (formerly the College of Architecture and Urban Planning) and the University of Washington. Prior to joining CBE, he served as director of the School of Architecture at the University of Illinois at Chicago, and before that as director of the School of Architecture and Interior Design at the University of Cincinnati. Friedman lectures and writes widely on professional education, public architecture, and contemporary theory. He is a member of the boards of the Seattle Art Museum, the Cascade Land Conservancy, and the American Architectural Foundation, and served as 2010-11 president of the Association of Collegiate Schools of Architecture. He earned advanced degrees in architecture at the University of Pennsylvania, where he completed his doctoral dissertation on the work of Louis I. Kahn. He was elevated to the AIA College of Fellows in 2001.



Duane Jonlin was recently appointed as the “Energy Code and Conservation Advisor” for Seattle’s DPD (Department of Planning and Development) where he will be the principal author (and enforcer) of the Seattle Energy Code and will represent Seattle nationally on energy code and energy conservation issues. Duane previously spent 15 years with NBBJ in Seattle, where his responsibilities included code compliance, quality management and knowledge sharing initiatives. He has served as a member of the Washington State Building Code Council and has been active in building code, accessibility and energy code development. Duane has lectured on technical and regulatory issues around the Pacific Northwest for AIA, CSI, NEAA and other organizations. He can be contacted at duane.jonlin@seattle.gov.



John Nowak has been involved in healthcare in many capacities throughout his 30-year career. He began as a staff nurse at Jefferson Healthcare and during his 20 years as a clinician he held multiple director positions in the Emergency Department, ICU/Critical Care and the Family Birth Center. His clinical career continued with responsibilities for Medical Informatics, eventually assuming the CIO role at Jefferson Healthcare. John also worked for Scientific Applications International Corporation, leading a 30-member software development team that created all clinical applications for VA hospitals. Most recently, John has led Jefferson Healthcare’s Lean Resource Office as Performance Improvement Officer.

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Dr. Mardelle McCuskey Shepley, B.A., M.Arch., M.A. (psychology), D.Arch., FAIA, FACHA, EDAC, LEED AP, is director of the Center for Health Systems & Design at Texas A&M University. A registered architect with 25-years of experience in professional practice, she is founder of ART+Science, a firm specializing in applied design research. Mardelle has conducted research and published extensively on the topic of pediatric facility design. Her books include Healthcare Environments for Children and their Families, Design for Critical Care, and Healthcare Facility Evaluation for Design Practitioners. A specialist in building evaluation and programming, she is the William Peña endowed professor at the College of Architecture at Texas A&M.



Jacob Simons is an anthropologist and designer who joined NBBJ to establish an internal innovation consultancy called REV, focused on design research and strategy. As the studio's Design Lead and recognized as an Innovation Catalyst, Jacob's mission is to understand the behavioral, cultural and experiential needs of people as a means to define the fundamental relevance of design. He believes the success of any design is buried under a complex understanding of people, their current needs and their aspirations for the future. For this premise, he has pursued design, not as a product of self-expression, but as a process of exploration and discovery. Through his integration of social science, design and business he is able to inform and inspire each creation – product, service, or space – to enhance human experience and performance and deliver value to the businesses with which he partners.

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Reception hosted by **Mulvanny G2**

Meeting space generously provided by :  **PUGET SOUND ENERGY**