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# Institute Honors and Awards Fellowship



### 2017 AIA Fellowship

Nominee Jonathan R. Kanda

Organization CO Architects

Location Los Angeles, CA
Chapter AIA Los Angeles

### **Category of Nomination**

Category Two - Practice (Technical Advancement)

### **Summary Statement**

Jonathan Kanda has pioneered the architecture of the American medical school. By fully integrating the clinical and academic realms, he creates hands-on, team-based, technology-rich learning environments that profoundly enhance the education of future healthcare professionals.

#### Education

Harvard University Graduate School of Design; Cambridge, Massachusetts; 2.5 years; Master of Architecture

University of California, Berkeley; Berkeley, California; 4 years; Bachelor of Arts in Architecture with Highest Honors

Licensed in: Commonwealth of Massachusetts, State of Florida, State of Arizona, NCARB Certificate

### **Employment**

CO Architects, October 2003 - present, 13 years
Payette, March 1996 - August 2003, 7 years 5 months
Gund Partnership, May 1995 - December 1995, 6 months (Internship)
William Rawn Associates, May 1994 - July 1994, 3 months (Internship)
MacDonald Architects, May 1991 - May 1993, 2 years
Office of Stanley Saitowitz, June 1990 - February 1991, 9 months

Nichols, Melburg & Rossetto, Summer/Winter recesses, 5 months (Internship)



Jonathan Kanda AIA, LEED AP



October 14, 2016

Ms. Mary Katherine Lanzillotta, FAIA

Chair, Jury of Fellows The American Institute of Architects 1735 New York Avenue, NW Washington, DC 20006-5292

Sponsorship for Jonathan Kanda, AIA

Dear Ms. Lanzillotta and Members of the Jury,

In the last decade our healthcare delivery system has undergone profound change. The increased demand for more doctors, demographic shifts, and calls for improved patient safety and outcomes has been coupled with significant educational reform. For over a decade, Jonathan Kanda has been instrumental in the dialogue for re-imagining the medical school education model. I have worked with Jonathan as colleague, friend and partner for 13 years and have witnessed his ascendancy as a leading national voice for the program, design and architecture of the American medical school. For these reasons, it gives me great pleasure to sponsor and recommend the elevation of Jonathan Kanda to the College of Fellows.

His early successes in projects for science and higher education demonstrated his ability to realize buildings of architectural distinction that greatly benefit users and clients, while contributing significantly to the surrounding community. They also validate Jonathan's keen understanding of how to design for the new directives that have revolutionized the teaching of science and research. As a result, Jonathan has been able to pioneer new modalities of physician training and develop building programs and spaces that are revolutionary in their pedagogical possibilities. His work has enabled existing schools of medicine to re-generate into problem-based, hands-on, technology-adept centers of learning. Nationally, he has also led and collaborated on the design of seven new, start-up medical schools that are supporting evolving medical teaching paradigms, increasing the number of physicians, and creating vibrant communities of discovery and exchange vital to our healthcare system evolution.

5055 Wilshire Blvd. 9th Floor Los Angeles, California 90036 www.coarchitects.com 323.525.0500 phone, 323.525.0955 fax

Jonathan is largely responsible for the emerging, interdisciplinary building typology at the American medical school, which will help to meet our rapidly evolving healthcare needs by focusing on team-based patient-centric care. As a prototype it provides the national benchmark for other architects charged with designing such facilities. Jonathan has pursued every opportunity to share his knowledge, benchmarks and insight with colleagues and educators. He speaks annually at multiple conferences nationwide and internationally, and has co-authored articles and publications in influential journals and magazines. He has expanded architectural services into the design of medical simulation facilities. Further, Jonathan continually innovates; his recent achievement is an interactive, digital "dashboard" programming tool that facilitates the programming process, integrating pedagogy, technology and benchmarks to allow rapid modeling of program scenarios. These kinds of tools embody the future of planning and make Jonathan's deep expertise available and accessible to other professionals.

Jonathan's national reputation and award-winning work has advanced our profession, added great distinction to the built community and uniquely answered the urgent needs of a critical sector of our society. I absolutely believe his exceptional dedication, creativity and remarkable accomplishments eminently qualify him for elevation to the College of Fellows.

Sincerely Yours,

Scott P. Kelsey, FAIA Managing Principal Summary

Jonathan Kanda has pioneered the architecture of the American medical school. By fully integrating the clinical and academic realms, he creates hands-on, team-based, technology-rich learning environments that profoundly enhance the education of future healthcare professionals.

#### CREATED INTEGRATED PROJECTS FOR EXISTING AND NEW MEDICAL SCHOOLS

Jonathan Kanda has led the profession by re-defining the architecture at our nation's medical schools. His work supports an evolving medical curriculum that integrates the basic sciences with early clinical skills training and team-based learning.

As medical schools shift away from group lectures and rote memorization towards more effective, active learning modalities, their education facilities have needed to evolve. Jonathan has been at the architectural forefront of this transformation. Working alongside medical educators and students, he has re-envisioned the architecture of next-generation medical education through 23 planning and building projects that bring "the clinic to the classroom." The far-reaching impact of his work is evidenced by design innovations, such as: the "collaborative lecture hall," which supports both lecture and group learning; the "learning studio," a flexible, technology-enhanced space for problem-based, small group learning; the "simulated hospital," a series of stage-set clinical environments for practicing patient care and critical thinking; and the "skills loft," a vanguard space that merges social learning space with classrooms, study rooms, and clinical training spaces.

Jonathan has also *led and collaborated on the programming and design for seven of the newest, start-up medical schools in the U.S., more than any other single practice in the nation.* These de-novo projects embody extraordinary opportunities to create new medical school models from scratch, often in parallel with curricular development, accreditation, and faculty recruitment. Moreover, these start-up, pilot programs *increase the number of physicians nationally,* create economic growth, and address underserved regions of the country. Jonathan's work on these pioneering projects has been toured and studied by medical educators and design professionals from nationwide and abroad.

#### DEFINED A NEW INTERDISCIPLINARY BUILDING TYPOLOGY

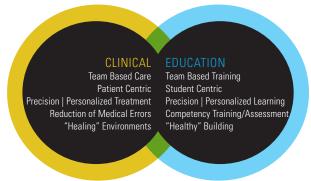
Jonathan has led the development of the interdisciplinary medical education building (aka "health sciences education building"): a new, distinct typology that responds further to team-based, patient-centric healthcare by **breaking down the traditional educational learning silos and merging multiple disciplines** (medicine, nursing, pharmacy, allied health) under one roof. He has completed two of the nation's largest interdisciplinary facilities: the 650,000 SF Collaborative Life Sciences Building in Portland, and the 270,000 SF Health Sciences Education Building in Phoenix. These projects holistically integrate clinical training functions with classrooms and social space, and leverage sharing between disciplines.

### **EXPANDED DESIGN SERVICES FORTHE PROFESSION**

Jonathan was among the first architects to *develop specialized architectural services and design standards to support the rising influence of medical simulation* to train healthcare professionals using patient-actors, realistic mannequins, visual technologies, and stage-like environments. His programmatic benchmarks, planning models, and built projects have been widely propagated and adopted as industry norms and best practices. To date, Jonathan has *led the development of 16 simulation centers in the U.S. dedicated to improving team-based healthcare, patient safety, and medical discovery.* 

#### ADVANCED THE PROFESSION NATIONALLY THROUGH KNOWLEDGE SHARING AND PARTNERSHIPS

Jonathan has empowered educators and architects to create the next generation of medical education facilities by developing and sharing design standards, best practices, and trends. In the last ten years, he has *delivered over 26 invited presentations at international, national, and regional venues* - including the AIA 2015 National Convention, AIA New York State, Society of College and University Planners (SCUP) International Conferences, and the Association for Medical Education in Europe. *His AIA 2015 National session, "Learning by Doing," is now an AIAU Online Course.* Through his projects, which have been developed in collaboration with over 12 architecture firms nationwide, Jonathan shares his expertise with fellow architects to advance the profession, enhance the education for future doctors and nurses, and ultimately, improve patient care.



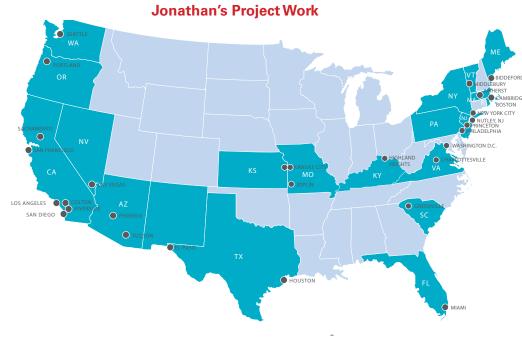
### Accomplishments

### 2.1 Significant Work – Prologue

### The Changing Form of Medical Education

For nearly a century, the four-year structure of the medical school curriculum has remained largely unchanged: students have traditionally spent the first two years in the lecture halls and science laboratories, focused on memorizing vast quantities of information; and the last two years in clinical rotations, gaining experience with the diagnosis and treatment of actual patients. The **disconnect between "classroom knowledge" and "clinic application" has been disregarded for decades**, resulting in healthcare that de-emphasized the patient experience, was subject to medical errors, and reinforced professional silos around the doctor, nurse, and allied health team members. Furthermore, there had been no new schools of medicine built since the early 1970s, resulting in outdated, disparate facilities and an imminent shortage of physicians.

Jonathan's work has focused on the development of new, start-up medical schools and interdisciplinary projects that address significant medical education reform, to prepare students for practice in an increasingly challenging healthcare system that emphasizes patient safety, team-based care, and integrated medical technologies.



### Medical Curriculum and Space Evolution

#### **TRADITIONAL INTEGRATED** BASIC SCIENCES BASIC **SCIENCES** CLASSROOM CLINICAL CLINICAL TRAINING TRAINING 1 2 3 CLINICAL SKILLS 2 3 SIMULATION GROSS ANATOMY LABORATORY YEARS IN MEDICAL SCHOOL YEARS IN MEDICAL SCHOOL

### **Interdisciplinary Trends**

Separate Space, Separate Curricula

Shared Space, Separate Curricula

Shared Space, Shared Curricula







#### **HEALTH SCIENCES EDUCATION BUILDING**

University of Arizona & Northern Arizona University

Size: 264,000 GSF

Role of Nominee: Project Director, Programmer,

Simulation Specialist Completion: 2012

Jonathan directed all phases and led a multi-institutional client group through an integrated programming, and design process for one of the nation's largest inter-professional medical education buildings.

- Merges two universities and five health sciences programs, including a new start-up medical school.
- Supports team-based training and patient-centric care.
- Houses one of the nation's most comprehensive medical simulation centers.
- Most-awarded building at the University of Arizona, including six AIA awards.



### COLLABORATIVE LIFE SCIENCES BUILDING & SKOURTES TOWER

Oregon Health & Sciences University, Portland State University & Oregon State University

Size: 650,000 GSF

Role of Nominee: Design Team Project Director, Simulation Specialist, Lead Education Programmer

Completion: 2014

Jonathan guided a multi-institutional client group through an integrated, fast-track programming and planning process for one of the nation's largest and most ambitious interdisciplinary medical education and research buildings.

- Merges three universities with education, research, and clinical programs.
- Supports interdisciplinary learning with the nation's largest team-based learning studios (over 300 students), simulation, classrooms, info commons, forum, community-life, research laboratories dental clinics, retail, auto and bike parking garages.
- Earned a 2015 SCUP/AIA CAE Award and 2015 Top Ten AIA COTE Award.



### CLAUDE MOORE MEDICAL EDUCATION BUILDING

University of Virginia Size: 60,000 GSF

Role of Nominee: Project Director, Programmer,

Simulation Specialist Completion: 2010

Jonathan directed all phases of the UVA School of Medicine's flagship building that is **renowned for its integration of learning technologies and hands-on educational spaces.** 

- Supports innovative "Next Generation" medical curriculum, which has become a national model for team-based learning and early clinical integration.
- Demonstrates how to design a leading-edge simulation facility, and the nation's largest team-based learning studio to house an entire medical school class.



#### **HEALTH SCIENCES EDUCATION BUILDING**

University of South Carolina School of Medicine & Greenville Hospital System

Size: 90,000 GSF

Role of Nominee: Project Director, Programming

& Planning

Completion: 2012

Jonathan directed all phases of this **new start-up School of Medicine** at the University of South Carolina, Greenville that was developed through a unique partnership with the Greenville Hospital System.

- Gave rise to the unprecedented "Clinical University," a new distinct model for developing new schools of medicine with a clinical partner.
- Supports a hands-on curriculum with learning studios, small-group learning spaces, regional simulation center, gross anatomy lab, and student/community life environments.
- Jonathan created a program to fit within the physical limitations of an existing shell building, transforming the facility into the signature "home" of the USC School of Medicine.



### PAUL L. FOSTER SCHOOL OF MEDICINE MEDICAL EDUCATION BUILDING

Texas Tech University Health Sciences Center El Paso, TX

Size: 125,000 GSF

Role of Nominee: Project Director, Programming

& Planning

Completion: 2007

Directed all phases of this **pioneering new start-up medical school on the US-Mexico border** focused on increasing physicians and solving regional health issues in this underserved region of Texas.

- One of the first new American medical schools in over forty years.
- Program and curriculum evolved together using newly developed benchmarks and space standards prior to faculty recruitment.
- Pilot anatomy lab integrates digital technology with dissection.
- Featured in the journal, The Anatomical Record.



#### **HEALTH EDUCATION BUILDING**

University of Kansas Medical Center

Kansas City, KS Size: 170,000 GSF

Role of Nominee: Principal for Programming

& Planning

Completion: 2017, in construction

Led the Schools of Medicine, Nursing, and Health Professions through an integrated programming process and directed the planning and design of educational spaces. **Jonathan's innovations create a "practice-ready" hub integrating the education, clinical, and research precincts on campus**.

- Includes two of the nation's largest learning studios for team-based teaching and community education.
- Creates interdisciplinary simulation center in Kansas for training healthcare teams focused on improving patient outcomes.
- Jonathan's programming resulted in 30,000 less SF than university originally anticipated



#### **HEALTH INNOVATION CENTER & FOUNDERS HALL**

Northern Kentucky University Highland Heights, KY

Size: 95,000 GSF New; 115,000 GSF Renovation Role of Nominee: Principal for Programming

& Planning

Completion: 2018, in construction

Led programming and planning for this integrated academic and research facility that will address healthcare issues by fostering **collaboration** between health education, informatics, sciences, law, business, athletics, and theater arts.

 To implement their ambitious vision, NKU relied on Jonathan's benchmarking, metrics, and best practices to create a program that leverages team training, social learning, and space sharing.



#### **HEALTH SCIENCES INNOVATION BUILDING**

University of Arizona Health Sciences Tucson, AZ

Size: 220,000 GSF

Role of Nominee: Principal for Programming

& Planning

Completion: 2018, in construction

Jonathan is directing this integrated instructional and research project that will enhance inter-professional, team-based collaborations between the Colleges of Medicine, Nursing, Pharmacy, and Public Health.

- Achievements include first ever "black box" simulation theater.
- Distributed "info commons" integrate and disperse study rooms, learning resources, and librarians amongst students and faculty.
- Adaptable "Forum" space, capable of transforming between social, collaborative, and instructional uses.



### TOSTESON MEDICAL EDUCATION CENTER PROGRAM

Harvard Medical School Boston, MA

Size: 120,000 GSF

Role of Nominee: Project Director, Lead Programmer

Completion: 2013

Jonathan assisted Harvard Medical School with a comprehensive architectural programming and conceptual planning study for transforming educational space on its campus as HMS innovates a new curriculum.

 Jonathan examined new blended models for classroom environments, simulation and clinical skills, gross anatomy, and social space.



#### **EDUCATION RESOURCE CENTER**

University of Virginia Health System Charlottesville, VA

Size: 45,300 GSF

Role of Nominee: Principal in Charge, Lead Programmer

Completion: 2016

Jonathan led the programming, planning and design of this integrated academic and clinical "connector building" that is currently nearing completion and will:

- Merge a new outpatient center with instructional space, a simulation center, and graduate medical education suite.
- Improve the patient experience by connecting to adjacent buildings while
  preserving appropriate separation between clinical and education functions.
- Maximize patient access to daylight and views on a constrained site.



### INTERPROFESSIONAL HEALTH & SCIENCES EDUCATION COMPLEX

Hackensack University Medical Center & Seton Hall University

Hackensack, NJ Size: 171,000 NSF

Role of Nominee: Simulation Specialist

Completion: 2018



#### MILLER MEDICAL EDUCATION CENTER

University of Miami Miller School of Medicine Miami, FL

Size: 120,000 GSF

Role of Nominee: Principal in Charge, Lead Programmer

Completion: 2018, in design

Led the development and planning of the simulation program for this interdisciplinary facility that brings together a **new**, **start-up medical school with nursing**, **allied health**, **and biomedical research laboratories**.

- Creates immersive, team-based training space that will bring medical, nursing, and allied health students together
- Jonathan creatively worked within the physical constraints of a former research laboratory to integrate the simulation program without compromising space standards and best practices.

Jonathan successfully led this invited competition entry to create an iconic new medical education center that would support the "medical school of the future." Currently in design, UM selected the scheme based on:

- Jonathan's creation of new adaptable space types the "Super Floor" and "Forum" that merge social, learning, and medical simulation functions.
- His mastery of medical education and creative re-envisioning of the space program to align with UM's vision.



**NEW SCHOOL OF MEDICINE** 

University of Nevada, Las Vegas Las Vegas, NV

Size: 160,000 GSF

Role of Nominee: Education Programmer

Completion: 2019, in design

This building will be the home to a new, start-up medical school that will increase the number of physicians practicing in Nevada.

 Jonathan created a programming engine and dashboard (See Exhibit 1) that allowed the university and design team to create a working program in one meeting.



#### **CENTER FOR MEDICAL SIMULATION**

Kansas City University of Medicine & Biosciences

Kansas City, MO Size: 41,000 GSF

Role of Nominee: Principal in Charge, Lead

Programmer, Simulation Specialist Completion: 2019 est., in design

Led programming and design for this renowned osteopathic medical school. When completed, it will be one of less than ten freestanding facilities in the country dedicated to medical simulation.

- Will broaden KCU's simulation reach to train medical students and healthcare providers in Kansas.
- Jonathan conceived the student "practice loft" for mastering knowledge and skills using simulation, virtual anatomy, and team training spaces.



#### **NEW SCHOOL OF NURSING BUILDING**

Columbia University Medical Center

New York, NY Size: 70,000 GSF

Role of Nominee: Lead Programmer, Simulation

Specialist

Completion: 2017, in construction

CO Architects and FX FOWLE won an invited competition for a new seven-story Nursing Building that will **enable Columbia to train more nurses and improve community outreach**. The design creates a "beacon" of collaborative learning, simulation, social and research space for this leading nursing school.

- Jonathan led the programming phase and designed the nursing simulation center, the "heart" and showcase of Columbia's nursing program.
- He prepared a space scheduling and utilization analysis to "right size" the program for this compact, urban site.



#### **BIOMEDICAL SCIENCES PARTNERSHIP BUILDING**

University of Arizona School of Medicine Phoenix, AZ

Size: 245,000 GSF

Role of Nominee: Project Director, Education

Programmer

Completion: 2016, in construction

This biomedical research laboratory extends the architectural strategies set by the adjacent Health Sciences Education Building that Jonathan directed and programmed, and provides conference, meeting, and informal "collision" spaces that support the **interdisciplinary research collaboration**.



#### INTEGRATED SPACE PLANNING STUDY

University of Virginia Health System Charlottesville, VA

Size: 1.2 M GSF

Role of Nominee: Principal in Charge of Education,

Workplace, and Community Life Programs

Completion: 2016

As part of a select consultant team of national experts, Jonathan led the University of Virginia through a comprehensive strategic plan to direct space use in the coming decade to align with UVA's transformative vision.

- This unprecedented study holistically examines the education, research, and clinical enterprises of the UVA Health System.
- Jonathan created benchmarks, analytics and recommendations for future investments that align space with vision.
- His data visualization techniques simplified complex information for university leadership and task force groups.



#### SIMULATION AND STANDARDIZED PATIENT CENTER

University of New England Biddeford, ME

Size: 13,000 GSF (Simulation only)
Role of Nominee: Simulation Specialist
Completion: 2016, in construction

The adaptive re-use of an existing armory building by Oak Point Associates (Biddeford, ME) will become a new educational hub for the University of New England's College of Osteopathic Medicine, the only medical school in Maine.

- Oak Point Associates retained Jonathan as their simulation specialist after attending his 2015 AIA Convention presentation.
- His design, artfully inserted into an existing armory structure, will support teams
  of doctors and nurses training in a variety of simulated medical environments.



#### SCHOOL OF MEDICINE / HSRI FEASIBILITY STUDY

University of California, Riverside Riverside, CA

Size: 600,000 GSF

Role of Nominee: Project Director, Programmer

Completion: 2004

Assisted UC Riverside's initiative to develop a new **independent four-year school of medicine** by establishing the Health Sciences Research Institute (HSRI).

 Jonathan led programming and master planning studies for both the HSRI and future school of medicine on UCR's emerging West Campus, which also included ambulatory care and biomedical research functions.



### CENTER FOR ANESTHESIA EDUCATION, RESEARCH & EVALUATION

Columbia University Medical Center

New York, NY Size: 3.000 GSF

Role of Nominee: Principal in Charge, Programming

and Design

Completion: 2013, completed design

Led the programming and design to renovate existing space on the 5th Floor of the Presbyterian Hospital Building to create the Center for Anesthesia, Education, Research and Evaluation.

 The Center's various simulation theaters will be used to train and educate integrated healthcare teams, improve patient safety, and provide research space.



#### **INSTRUCTIONAL SPACE ANALYSIS – 3 CAMPUSES**

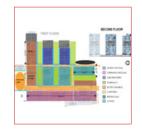
University of Kansas School of Medicine Wichita and Salina, KS Size: 300,000 GSF

Role of Nominee: Principal for Programming & Planning

Completion: 2014

Led this integrated, multi-campus study to evaluate and program all instructional space for the three campuses of the University of Kansas School of Medicine.

 Based on Jonathan's study and program development, the University of Kansas proceeded with the Health Education Building at the Kansas City Campus.



#### **BRANCH MEDICAL SCHOOL STUDY**

Kansas City University of Medicine Joplin, MO

Size: 100,000 GSF

Role of Nominee: Principal in Charge, Programming

and Design

Completion: 2013

Jonathan directed the programming and conceptual design to study the feasibility of developing a new, branch campus of KCU's Osteopathic School of Medicine by renovating a vacated temporary hospital facility erected after the devastating Joplin tornado in 2011.

 Based on Jonathan's program and concept design, KCU proceeded to purchase the hospital property and develop the new branch campus, the first new medical school in Missouri in 50 years.



### **GROSS ANATOMY BUILDING**

Ross University School of Medicine Commonwealth of Dominica

Size: 10,000 GSF

Role of Nominee: Project Director, Programming

& Planning

Completion: 2011

Led the planning to renovate the university's Gross Anatomy Building to accommodate an increase in class size, **integrate digital technologies with cadaver-based dissection**, and support "lecture-in-lab" instruction.



### NEW UNDERGRADUATE SCIENCE CENTER DESIGN STUDY

Whittier College Whittier, CA

Size: 90,000 SF renovation / 45,000 SF addition

Role of Nominee: Project Director

Completion: 2009

Directed the evaluation and re-purposing of an existing facility to create a multidisciplinary science center. Teaching and research **laboratories are organized to promote "science on display"** and student-faculty/faculty-faculty collaborations.

### Significant Work – Completed at Payette



#### MCCARDELL BICENTENNIAL HALL

Middlebury College Size: 226,600 GSF

Role of Nominee: Designer

Completion: 2000

Home to seven academic departments, this multidisciplinary science facility is used by both science and non-science majors. Several green building features are incorporated in this environmentally sound project that predates the LEED program.

• The project highlighted the collaborative trends in science that would ultimately influence Jonathan's work in medical education.



#### PRINCETON ENVIRONMENTAL INSTITUTE

Princeton University Princeton, NJ Size: 20.000 GSF

Role of Nominee: Job Captain

Completion: 2001

Served as Job Captain for this significant renovation of Princeton's historic Guyot Hall to create a new research hub dedicated to the study of environmental issues and policies. In addition to the offices and meeting spaces for PEI, the building's large central hall was preserved to house a natural history museum collection.



### **BENESKI EARTH SCIENCES BUILDING & MUSEUM OF NATURAL HISTORY**

Amherst College Amherst, MA Size: 56.000 GSF

Role of Nominee: Project Architect

Completion: 2006

Located at the head of an evolving campus quad, the challenge was to create a new home integrating the Geology Department and Natural History Museum which exhibits a prominent collection of paleontology, geological, and anthropological material.

- Jonathan was involved in the programming and design of this unique building that received multiple awards from AIA New England and the Boston Society of Architects.
- Informed Jonathan's approach to "science and learning on display".



#### MAXWELL DWORKIN BUILDING

Harvard University Cambridge, MA Size: 100.000 GSF

Role of Nominee: Project Architect

Completion: 1999

Served as project designer and architect for the flagship home of Harvard's computer science and electrical engineering programs, housing state-of-the-art instructional and research spaces.

- Jonathan's work on the adaptable engineering labs informed his flexible instructional and simulation spaces for medical education.
- Jonathan led the development of the lecture halls, instructional spaces, and oversaw the project during construction.

### 2.1 Relevant Positions, Academic Involvement & Community Engagement

#### **Mentorship & Community Engagement**

Commitment to the sustained growth of our colleagues and community.

#### Mentor

Asian American Architects / Engineers Association Los Angeles, CA, 2010 - Present

#### **Green Careers Panel Member**

Whittier College, 2006

#### **President and Board Member**

Fox Hills Homeowners Association Culver City, CA, 2007 - Present Jonathan volunteers his time to lead the HOA, and oversees all buildings and grounds improvement projects.

### Co-Founder CO University (CO Architects)

In-house education and leadership development program, 2010 - Present

### Co-Founder Young Designer's Core (Payette)

"Jonathan Kanda had a significant positive impact on the culture of Payette through his co-founding of the Young Designers Core in 2000. YDC is a grassroots organization supplementing the professional development of interns through educational opportunities and advocating for their growth through its culture of mentorship and shared knowledge. YDC has been a critical, enduring part of Payette, recognized with two AIA IDP Outstanding Firm Awards."

#### Robert Schaeffner, FAIA

Principal / Payette - Boston, MA

#### **Invited Design Critic / Jury Member**

Investing in our nation and future practitioners.

#### **NIH Architectural Peer Reviewer**

National Institute of Health American Recovery & Reinvestment Act Facility Improvement Program, 2009

### **Advanced Design Studio Instructor**

UCLA Extension Interior Design Program, Los Angeles, CA, 2004 & 2005

#### **Design Studio Instructor**

Boston Architectural College Boston, MA, 1994, 2001, 2002

#### **Invited Architectural Design Critic**

Harvard Graduate School of Design, 1999
Boston Architectural College, 1994 - 2002
Rhode Island School of Design, 2001
University of Houston, 2007 - 2009
University of California, Berkeley, 1993
University of California, Los Angeles, 2004 - 2005
University of Southern California, 2016

"When I was teaching design studios at the University of Houston and Rice University, I would often invite Jon to reviews. Jon's skilled balance as a designer and educator represented the true role of an Architect to my students. He always offered multiple trajectories the student could follow as they developed their work, making him a favorite with students and fellow jurors, and allowing me to monitor my own evolution as an instructor. I have always admired Jon's ability to critique without condescension."

#### Dallas Felder, AIA, LEED AP

Design Principal / HDR - Houston (Former Design Studio Instructor, University of Houston)

### **Professional Organizations**

Active engagement through sharing and discussion.

#### American Institute of Architects

Conference speaker

AIA Los Angeles
U.S. Green Building Council
Society for Simulation in Healthcare

Conference speaker

Society for College & University Planning

Conference speaker

Asian American Architects / Engineers
Association

Active in mentoring programs

Association for Medical Education in Europe

International conference speaker

#### **Licenses & Certifications**

Licensed Architect, Massachusetts Licensed Architect, Florida Licensed Architect, Arizona NCARB Certification LEED AP BD+C

"I first became acquainted with Jon through the Asian American Architects and Engineers Society mentorship program about 6 years ago. He served as an advisor in the early stages of my career continually offering his friendship and guidance. Jon would somehow find time in his busy schedule to meet with me to generously share his wealth of experience and knowledge in architecture.

His advice continues to shape and guide the decisions I make throughout my professional development."

#### Malvin Hwee, Assoc. AIA

Project Manager / Landry Design Group - Los Angeles

### 2.2 Awards, Honors, & Recognitions

#### AIA - National

Collaborative Life Sciences Building OHSU, OSU, PSU / Portland, OR

2015 Top 10 Award, AIA COTE (Committee on the Environment)

2015 Delivery Process Excellence, Honorable Mention

AIA TAP Building Information Model Awards

**2015 Merit Award**, Excellence in Architecture, New Building, SCUP/AIA-CAE (Committee on Architecture for Education)

**Health Sciences Education Building** 

University of Arizona & Northern Arizona University

2015 Design Excellence Award, AIA-CAE

(Committee on Architecture for Education)

**2013 Stellar Architecture Using BIM,** AIA TAP Building Information Model Awards

#### AIA - Regional

Health Sciences Education Building
University of Arizona & Northern Arizona University
2013 Merit Award for Architectural Design, AIA Western Mountain Region
2013 Honor Award for Architectural Design, AIA California Council
2013 Merit Award for Architectural Design, AIA Arizona

#### AIA - Local

Health Sciences Education Building
University of Arizona & Northern Arizona University
2010 Citation, Next LA Awards, AIA Los Angeles

#### Industry and Magazine

Collaborative Life Sciences Building OHSU, OSU, PSU / Portland, OR

2015 Best Project of the Year, Higher Education/Research Category, ENR Northwest

2015 Top Projects, First Place Winner for Public Building,

Daily Journal of Commerce

**Health Sciences Education Building** 

University of Arizona & Northern Arizona University

2014 WAN Façade Award, World Architecture News

2014 Education Sector Building of the Year Shortlist,

World Architecture News

2013 Best Façade Honorable Mention, Best of Design Awards,

The Architect's Newspaper

2013 Best Higher Education/Laboratory Project, Top Projects for 2013, ENR Southwest

2013 Best of LA Architects Award, Los Angeles Business Council

#### Institutional Awards

Collaborative Life Sciences Building

OHSU, OSU, PSU / Portland, OR

2015 Engineering Excellence Award, ACEC

(American Council of Engineering Companies)

2015 Distinguished Project Award, NW Construction Consumer Council

2015 American Architecture Award, The Chicago Athenaeum:

Museum of Architecture & Design

**2015 Project of the Year,** Engineering Excellence Awards, ACEC Oregon

2015 Outstanding Project of the Year, Northwest Wall & Ceiling Bureau

2015 Excellence in Concrete Award, American Concrete Institute,

Oregon Chapter

**Health Sciences Education Building** 

University of Arizona & Northern Arizona University

**2016 Excellence in Structural Engineering,** Structural Engineers Association of Southern California

**2014 American Architecture Award,** The Chicago Athenaeum: Museum of Architecture & Design

2013 Award of Merit, Arizona Forward Environmental Excellence Awards

2013 AZRE Red Awards: Most Challenging Project, Arizona Real Estate

**2013 North American Copper in Architecture Award,** Copper Development Association & Canadian Copper and Brass Development Association

2013 Design Award, Natural Metal Category, Metal Architecture

### **2.3** Presentations

### AIA Presentations



Learning By Doing: New Paradigms in Educational Design and Programming AIA National Convention, May 2015 Atlanta, GA



Learning-by-Doing: New Paradigms in Educational Design and Programming AIAU Online continuing education course video, 2015



New Paradigms in Educational Design and Programming ArchEx East AIA Virginia November 2015 Richmond, VA



New Paradigms in Educational Design and Programming AIA-NYS Design Conference, November 2014 Sartoga Springs, NY



Mentoring Programs That Work AIA National Convention May 2002 Charlotte, NC

### New Medical Schools, Clinical / Academic Models



Innovations and Features for the Next General of Medical Education Learning Environments

AMEE: Association for Medical Education in Europe September 2015 Glasgow, Scotland



Classroom/Clinic Convergence: The Newly Emerging Hospital/ Health Science Education Facility Model

Tradeline – Facility Strategies for Academic Medicine & the Health Sciences, October 2015 San Diego, CA



New Space Plans for New Curricular Mandates, LCME Accreditation, Growth & Team-Based Learning Tradeline Facility Strategies for Academic Medicine and Allied

Academic Medicine and All Health, October 2014 Boston, MA



Directions in Health Sciences Education: Emerging Spaces for Learning Learning Environments Conference January 2013 Boston, MA



Education Facilities for Medical & Health Science: The Next Generation

Tradeline—Academic Medical & Health Science Centers November 2012 San Francisco, CA



Directions in Health Sciences Education & New Models for Learning

American Association of Medical Colleges / GBA GIP Joint Meeting, April 2012 Denver, CO



Directions in Health Sciences Education & New Models for Learning Environments SCUP Webcast November 2011



Lean Lifecycle Planning for Continuous Operational Improvements Tradeline – Lean Facility Lifecycle March 2011 San Diego, CA



Guest Speaker Southlake Regional Health System Conference July 2010 Toronto, Canada

### 2.3 Presentations



Program, Planning, and Governance Models for Integrated Medical Education Initiatives

Tradeline - Academic Medical Centers October 2008 San Francisco, CA



How Patient Treatment Models & New Technologies are Changing Patient Care & Medical Education Tradeline - Academic Medical

Centers
December 2007
San Diego, CA





Strategies for Shared Resources for Interprofessional Health Sciences

Tradeline – Facility Strategies for Academic Medicine & the Health Sciences, October 2016 Scottsdale, AZ



Planning & Delivering
Collaborative Learning
Environments – Spaces, Teams,
and Tools: 1+1=3.
SCUP Pacific Regional
Conference March 2015
Portland, OR



Planning for Team-Based Learning, Research & Care Tradeline Academic Medical & Health Sciences Centers October 2013 Orlando, FL



Interprofessional Education at the Phoenix Biomedical Campus

Healthcare Design Conference November 2012 Phoenix, Arizona



Integrated Planning to Support Health Sciences Education SCUP-46 International Conference July 2011 National Harbor, MD



Why Interdisciplinary Education Programs Should be Lowering Your Capital & Operating Costs Tradeline – Academic Medical & Health Sciences Centers October 2009 Boston, MA



New Generation Learning Environments for the Health Sciences SCUP-44 International Conference

July 2009
Portland, OR





Clinic to Classroom: Columbia University's Bold Initiative for Simulation-Based Learning SCUP-49 International Conference, July 2014 Pittsburgh, PA



Designing the SIM Center of the Future

11th Annual International Meeting on Simulation in Healthcare January 2011 New Orleans, LA



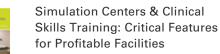
Planning the Inter-Professional Simulation Center: Critical Features for Success MED-Ed Facilities Conference, April 2014



Guest Speaker: 1st Annual Education and Technology Forum; Mayo Clinic January 2013



Boston, MA



Tradeline—Academic Medical & Health Science Centers December 2011 San Diego, CA

### 2.3 Publications & Media Coverage

### Publications By or Featuring Jonathan Kanda



### "Student Centric Design in Simulation Centers".

by Jonathan Kanda Health Facilities Management Magazine, 09/2016

"Medical School and Health Science Trends and Mandates" – Jonathan Kanda contributed and quoted. Tradeline Online Report, 06/2015

"Tradeline Exclusive Online Report: Medical School and Health Science Trends and Mandates: Design Must Accommodate Accreditation, Growth, and Team-Based Learning" – Interview with Scott Kelsey and Jonathan Kanda
Tradeline Online Report, 06/2015

Interview with CO Architects' Jonathan Kanda on the Collaborative Life Sciences Building being named to the AIA Top 10 Green Projects List Portland Architecture. 05/2015

"Interprofessional Resource Sharing at Academic Medical Facilities" – Jonathan Kanda contributed and quoted.

Tradeline Online Report, 10/2014

"Mentoring Interns: A Firm Commitment"
AlArchitect, "When Firms Mentor Interns, The
Whole Profession Wins" – Jonathan Kanda
contributed and quoted.

AIA Best Practices. Revised 12/2006

### "Anatomy Meets Architecture: Designing New Laboratories for New Anatomists"

By Robert Trelease PhD; Jonathan Kanda contributed and credited

The Anatomical Record, 2006

### Television Coverage or Video Featuring Projects by Jonathan Kanda

"Cool Spaces! The Best New Architecture" (HSEB Phoenix)

PBS Television Series, 2014

"New high-tech medical facility opens in Portland" KGW TV, 06/2014

"Copper Rainscreen Cladding Systems"
Green CE, Copper Development Association
AIA Continuing Education Video, 2012

International and National Publications Featuring Projects by Jonathan Kanda

"Collaborative Life Sciences Building"
DDn - Design Diffusion News (Italy), #218, 01/2016

### "Only in Arizona"

"Commercial Design Trends" (New Zealand), 02/2016 (HSEB Phoenix)

"Arizona Health Sciences Education Building"

University Trends, Routledge (United Kingdom), 2015

#### "A Primera Vista"

Obras (Mexico), 04/2015 (HSEB Phoenix)

"Phoenix Rising"
OF Arch (Italy), #128,
01/2014 (HSEB
Phoenix)

"Architectural
Competition Works"
Ifengspace (China),
2012 (HSER Phoenix)



# "Sustainability in the Desert" The Construction Specifier (Canada), 02/2014

(HSEB Phoenix)

### "Cool Spaces! The Best New Architecture"

ORO Editions, 04/2016 (HSEB Phoenix)



### Select National Coverage Featuring Projects by Jonathan Kanda

"Back to School: Design lessons from the world's smartest education centers"

CNN Style, 09/2016

"Health Sciences Education Building 2015 AIA CAE Design Excellence"

Livegreen, 08/2015

"AIA Tap Innovation Award Recipients Selected"
Building Envelope Online, 05/2015

# AIA TAP Innovation Award Recipients Selected (OR CLSB - Honorable Mention, Delivery Process Excellence)

The American Institute of Architects, 05/2015

"4 Projects Honored with AIA TAP Innovation Awards for Excellence in BIM and Project Delivery" Building Design & Construction online, 05/2015

"Togetherness: Healthcare Design is Bigger, Brighter and More Collaborative Than Ever Before"

The Architect's Newspaper East, 06/2016

"LEED Platinum Collaborative Life Sciences
Building: Model of Interdisciplinary Education and
Research"

facilitiesnet.com, 05/2016

### 2.3 Publications & Media Coverage

### "CO Architects Leads Health Design with Three Construction Milestones"

MCD Magazine (Medical Construction & Design) Mcdmag.com, 04/2016

### "NKU's Health Innovation Center Now Under Construction"

Healthcare Design, 10/2015

"In Detail > Collaborative Life Sciences Building: An acrobatic structure and rugged exterior cladding by CO Architects and SERA Architects bring to life a cutting-edge technical laboratory building"

The Architect's Newspaper, 10/2015

### "In Detail: Collaborative Life Sciences Building & Skourtes Tower"

The West Architect's Newspaper, 09/2015

### "Collaboration is Key"

School Construction News, 08/2015

# "Tradeline Exclusive Report: Portland's Collaborative Life Sciences Building & Skourtes Tower"

Tradeline Online, 06/2015

### "Inaugural Technology in Architectural Practice Innovation Awards"

ArchDaily, 05/2015

### "Portland's Collaborative Life Sciences Building Earns Recognition"

School Construction News, 05/2015

### "American Architecture Awards – Health Sciences Education Building – Phoenix, Arizona, 2012"

The Chicago Athenaeum Museum of Architecture & Design, 10/2014

### "Oregon's Largest Education Building Achieves LEED Platinum Certification"

agreenliving.org, 09/2014

# "Deserving Winner Found in CO Architects: CO Architects awarded first place in 2014 WAN Façade Award for the Health Sciences Education Building in Arizona"

World Architecture News. Com, 09/2014

### "Training Team-Skilled, Tech-Ready Medical Students"

Tradelineinc.com, 05/2014

### "WAN Awards Education Shortlist, Health Sciences Education Building, Phoenix"

WorldArchitectureNews.com, 05/2014

### "School of Medicine at the University of South Carolina Greenville"

TradelineInc.com, 04/2014

### "Sonoran Desert Vernacular by CO Architects"

The Architect's Newspaper, 03/2014

### "Copper Canyon: University of Arizona's Recycled Metal Façade"

The Construction Specifier, 02/2014

### "Cool Reliefs: CO Architects Crafts Copper Heat Shield"

Architect, 02/2014

### "Copper Keeps a Phoenix Medical Building as Cool as a Rock"

Architect Magazine online, 01/2014

### "Columbia University School of Nursing."

ArchDaily. 3, 11/2013

# "Hello Nurse! FXFOWLE and CO Architects Team Up for Columbia School"

Architects' Newspaper (print edition), 11/2013

### "Columbia University to Build New Nursing School"

SchoolConstructionNews.com, 11/2013



### "Columbia University Medical Center Plans School of Nursing"

TradelineInc.com, 11/2013

### "ENR Southwest Announces 2013 'Best Projects' Award Winners"

ENR Southwest, 09/2013

### "Copper Phoenix: CO Architects' New Building at the University of Arizona"

Architect's Newspaper (The West), 08/2013

### "2013 North American Copper in Architecture (NACIA) Award Winners"

Copper.org, 06/2013

### "2013 Los Angeles Architectural Awards Announced"

ArchDaily.com, 06/2013

### "Sustainability in the Desert"

Multivu.com, 05/2013

### "Sustainability in the Desert: Video Case Study Offers CE Credit for Architects"

Copper.org, 05/2013

### "University of Arizona, Health Sciences Education Building, Phoenix, Ariz."

LabDesignNews.com, 03/2013

### 2.3 Publications & Media Coverage

#### "A New Model in Healthcare Education"

School Construction News, 01/2013

### "Innovative Medical Education Building Welcomes Students"

AZBio.org, 10/2012

### "Design Shaping the 21st Century College Campus"

ContractDesign.com, 03/2012

### "Laboratory Design: City of Phoenix, Ariz. Health Sciences Education Building"

RDMag.com, 04/2011

### "Phoenix Health Sciences Education Building"

Arch Daily online, 02/2011

### "Health Building Uses Nature's Blueprint"

School Construction News, 02/2011

### Select Regional Coverage Featuring Projects by Jonathan Kanda

### "Build Team Takes Shape for \$75M Education Building at KU Med"

Kansas City Business Journal, 01/2015

### "South Waterfront Building Rated LEED Platinum"

Daily Journal of Commerce Oregon, 09/2014

### "Better doctors and dentists: Huge new science building shared by Portland state, OHSU, OSU will overhauls science, medical training."

The Oregonian (OregonLive.com), 06/2014

# New life sciences building in South Waterfront hailed as game-changer for education, neighborhood

The Oregonian (OregonLive.com), 06/2014

### "Beam Me UP, Scotty': Peek inside the futuristic \$295M medical center at South Waterfront"

BizJournals.com/Portland, 06/2014

### "OSU, PSU and OHSU sharing new \$300M medical building"

Statesman Journal/Associated Press, 06/2014

### "Three universities share large new medical building on Portland waterfront"

The Register-Guard/Associated Press, 06/2014

### "Regents approve 136M biosciences building in downtown Phoenix"

BizJournals.com/Phoenix, 06/2014

### "KCUMB President Talks about a New, Post-Pletz Era"

Kansas City Business Journal online, 05/2014 (KCUMB-CMS)

### "UA's Phoenix Cancer Center is 'Topped Off,' Joins Award-Winning Medical School Building"

UANews.org, 05/2014

# "Green Property of the Month: CO|FXFOWLE Designs 65,000 s/f Projected LEED Silver Building for Columbia School of Nursing"

NYREJ.com, 11/2013

### "KCUMB Ready to Implement \$60 Million Upgrade"

Northeastnews.net, 11/2013

# "Columbia Nursing Students Will Get Their Tuition's Worth From This State-of-the-Art Building"

New York Business Journal, 10/2013

### "Columbia University's New Nursing School Will Look Like This"

Curbed New York, 10/2013

### "Columbia University and Karim Rashid Bring Downtown Cool to Uptown"

NYdailynews.com, 10/2013

### "43rd Annual LA Architectural Awards – Best of LA Architects Award Health Sciences Education Building, Phoenix"

LABusinessCouncil.org, 06/2013

### "Simulation Center to Give Medical Students Authentic Experience"

Oregon Daily Journal of Commerce, 11/2012

#### "Firms See Value in Teamwork Under One Roof"

Daily Journal of Commerce Online, Oregon, 08/2012

### "Dental Addition Will Expand Oregon Health & Science University Building"

Daily Journal of Commerce, Portland, Oregon 07/2011

#### "Project is All About Collaboration"

The Daily Journal of Commerce, Portland, Oregon 05/2011

### "Adjusting the Prescription: The School of Medicine Overhauls Its Century-old Educational Approach"

University of Virginia Magazine, Spring 2011



### Table of Contents



Exhibit 1

## Pioneering Programs and Designs for Medical Education

**United States** 

Creating new programs, environments, and buildings that redefine the American medical school.

Graphics: CO Architects



Exhibit 2

### Collaborative Life Sciences Building & Skourtes Tower

Oregon Health Science University, Oregon State University & Portland State University

A national prototype for the convergence of interprofessional medical education, research, and clinical care.

Photographer: Jeremy Bitterman Photography



Exhibit 3

### Health Sciences Education Building

University of Arizona & Northern Arizona University Creating a national model for interprofessional medical education for two institutions.

Photographer: Bill Timmerman Photography



**Exhibit 4** 

### Claude Moore Medical Education Building

University of Virginia School of Medicine

Seminal project featuring the team-based learning studio and medical simulation training spaces.

Photographer: Robert Canfield Photography



Exhibit 5

### Paul L. Foster School of Medicine

Texas Tech University El Paso

Pioneering start-up medical school designed alongside emerging curriculum, faculty, and accreditation.

Photographer: Robert Canfield Photography



Exhibit 6

### Health Sciences Education Building

University of South Carolina & Greenville Health System Developing a unique start-up medical school model, the "clinical university," with a hospital system partner.

Photographer: Robert Canfield Photography



Exhibit 7

### Pioneering Medical Simulation Design

**United States** 

Creating new design services, standards, and best practices for this rapidly evolving form of immersive medical training.

Renderings and Graphics: CO Architects



Exhibit 8

### Health Sciences Innovation Building

University of Arizona Health Sciences

A new model for interprofessional medical education and research featuring vanguard simulation, learning, and discovery environments.

Renderings: CO Architects

### Pioneering Programs and Designs for Medical Education

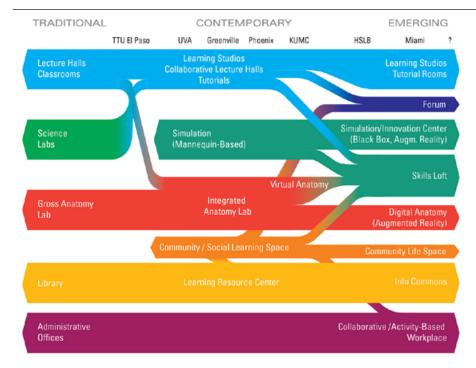


United States

Architecture Firm of Record: CO Architects

**Design Firm:** CO Architects **Completion:** 2003 - Present

Role of Nominee: Principal in Charge, Programmer



**Synopsis:** Our medical schools need new facilities to meet national mandates for increased enrollments, curricular reform focused on team-based care, and the integration of clinical training and new learning technologies. Jonathan has met these complex demands by pioneering new programs and medical education spaces that optimize hands-on training and collaboration, blur social and formal learning, provide long-term adaptability, and integrate new technologies. The hallmarks of his work include:

- Defined the space types and architectural features of the interdisciplinary "health sciences education building" typology to support team-based patient care training.
- Creation of facility benchmarks, space standards, and best practices that have been widely adopted, propagated, and shared.
- Continued invention of new, experimental spaces that anticipate the future of medical education.

"I had the privilege of working with Jon on our architectural programming study of the medical education building at Harvard Medical School (HMS). Jon brought a wealth of experience and expertise to the project from his extensive background in designing medical and health education facilities across the US. Throughout the process, he demonstrated his understanding of the needs of a new curriculum and new approaches to pedagogy that were under development at HMS and ensured that those changes informed the programming design he and his colleagues created. He also understood the importance of listening to the people who teach, study, and learn in the building, conducting surveys of students, holding focus groups with students, faculty and staff, and incorporating their feedback into the architectural plan. Jon was the consummate professional throughout the project, and HMS benefited greatly from our collaboration with him."

**Jane M. Neill,** Associate Dean for Medical Education Planning & Administration, Program in Medical Education, Harvard Medical School

#### Select Presentations

### Innovations and Features for the Next General of Medical Education Learning Environments

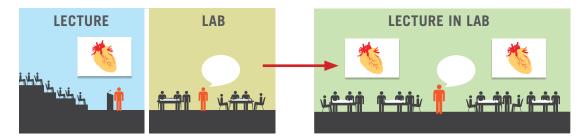
AMEE: Association for Medical Education in Europe September 2015 Glasgow, Scotland

### Planning & Delivering Collaborative Learning Environments – Spaces, Teams, and Tools: 1+1=3.

SCUP Pacific Regional Conference March 2015 Portland, OR

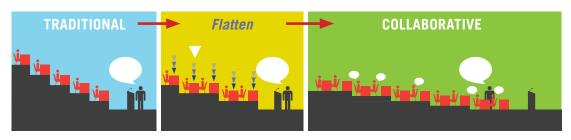
Three Innovations for Active, Team-based Medical Education

The Integrated Anatomy Lab - Working with anatomists, Jonathan integrated visual technologies into the anatomy lab, improving the learning experience by merging lecture and lab dissection.





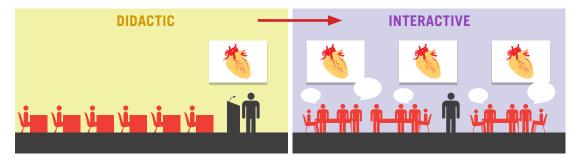
The Fall of the Lecture Hall – Jonathan transformed the traditional steep lecture hall into a multi-purpose, collaborative learning space





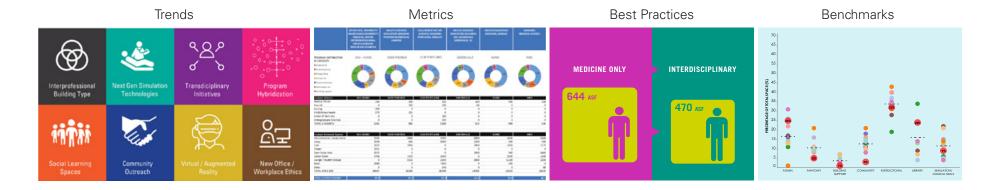


The Learning Studio Revolution – To support curricular and pedogogical shifts towards active, team-based learning, Jonathan has introduced this flat, adaptable, technology-rich space to several medical schools nationwide.





**Benchmarks, Metrics, and Best Practices** – Jonathan assembles, analyzes, and shares his data rich repositories of trends, program benchmarks, space design standards to architects and educators. His data visualization style makes information-sharing simple and accessible.

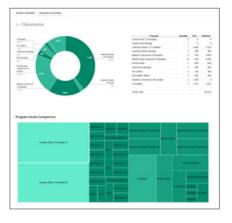


### **Programming Engine and Dashboard**

Jonathan created a medical education "engine and dashboard" that automates and "jump starts" the programming process. Through a series of simple questions and inputs, the engine generates an initial space program, displays visual data, and creates benchmark comparisons with similar projects. Recently used for UNLV's new start up medical school, a program was created in one meeting, greatly expediting the planning and design.



### Program Creation



Program Metrics /Benchmarks



### **Declaration of Responsibility**

I have personal knowledge of the nominee's responsibility for the exhibit listed above. That responsibility included:

● Largely responsible for design ● Project under direction of nominee ● Nominee's firm executed project ● Other: programs, benchmarks, design standards, and tools

Scott Kelsey, FAIA / Managing Principal, CO Architects (role: colleague witness)

### Collaborative Life Sciences Building & Skourtes Tower

Exhibit 2

Oregon Health and Science University, Oregon State University & Portland State University / Portland, OR

Architecture Firm of Record: SERA Architects, Portland, OR

**Design Firm:** CO Architects

Completion: 2014

Role of Nominee: Design Team Project Director, Lead Education Programmer, Simulation Specialist



**Synopsis:** The challenge for this multi-institutional, interdisciplinary building was to merge academic, research, and clinical functions on a new campus along Portland's South Waterfront. Housing OHSU's Schools of Medicine, Nursing, and Dentistry, OSU's College of Pharmacy, and PSU's undergraduate science programs, the project contains learning studios, simulation, info commons, public forum, research labs, dental clinics, retail, and auto and bike parking garages. Particular emphasis was placed on wellness concepts in this **LEED Platinum** project.

Jonathan led the multi-institutional client group through an accelerated programming and planning process that allowed the aggressive construction schedule to begin within four months. Notable innovations to maximize collaboration include his design of the scalable 300 seat learning studio (one of the nation's largest) and the state-wide simulation center. **Jonathan's "Town Hall" concept creates an interior, three-dimensional 'campus quad'** that organizes and connects the diverse program functions through a dynamic series of ramps that double as social interaction spaces for building community culture.

"Jon brought exemplary programming leadership and unmatched health education design expertise to our Collaborative Life Sciences Building project. Today, over 3,000 students in medicine, nursing, dentistry, pharmacy, chemistry and biological sciences use the CLSB. For OHSU and its university partners, the building is profoundly changing the way we educate, research, and care by providing cuttingedge spaces that enable new collaborations and discoveries. Jon listened, synthesized, and transformed our vision and needs into a true interdisciplinary hub that is both unique and far-reaching in its impact to improve healthcare in Oregon and beyond."

**Brian Newman,** Associate VP Campus Planning, Development & Real Estate Oregon Health and Science University

#### Select Awards

#### AIA - National

2015 Merit Award, Excellence in Architecture, New Building, SCUP/AIA-CAE

2015 Top 10 Award, AIA COTE

2015 Delivery Process Excellence, Honorable Mention AIA TAP Building Information Model Awards

#### Industry and Magazine

2015 Best Project of the Year, Higher Education/Research Category ENR Northwest

2015 Top Projects, First Place Winner for Public Building Daily Journal of Commerce

2015 American Architecture Award, The Chicago Athenaeum

### Collaborative Learning Features





### Level 3 Floor Plan



### **Select Publications**

### "Collaborative Life Sciences Building"

DDn - Design Diffusion News (Italy), #218, January 2016

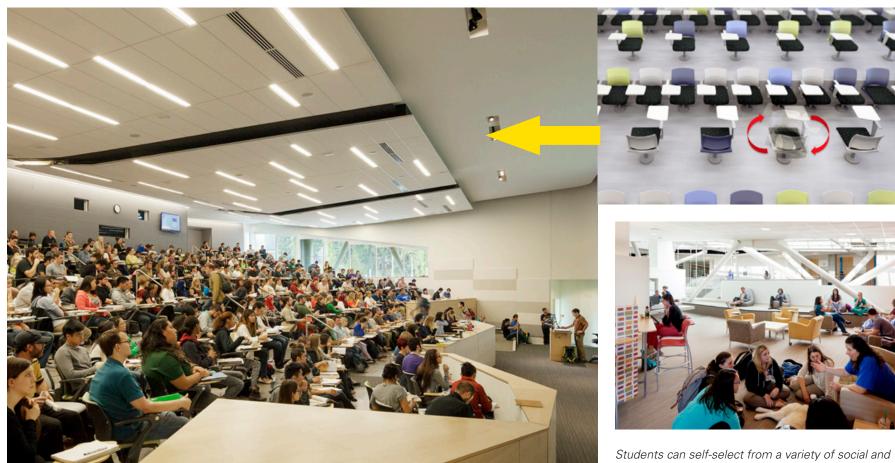
Interview with CO Architects' Jonathan Kanda on the Collaborative Life Sciences Building being named to the AIA Top 10 Green Projects List.

Portland Architecture, May 2015

"Medical School and Health Science Trends and Mandates" Tradeline, June, 2015

### **Collaborative Lecture Hall**

By creating deep tiers and rotating tablet-arm chairs, Jonathan solved the need for a large 400-seat capacity lecture hall capable of small group break-out discussions.



community spaces that support serendipitous learning and interaction.

### **Declaration of Responsibility**

I have personal knowledge of the nominee's responsibility for the exhibit listed above. That responsibility included:

• Project under direction of nominee • Other: Education, Programming, Simulation Specialist.

Brian Newman / Associate VP Campus Planning, Development & Real Estate, OHSU (role: client, executive direction)

Phoenix Biomedical Campus / University of Arizona & Northern Arizona University

Architecture Firm of Record: CO Architects

**Design Firm:** CO Architects

Completion: 2012

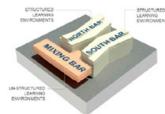
Role of Nominee: Project Director, Lead Programmer, Simulation Specialist



**Synopsis:** The challenge was to enable a partnership between two Arizona Universities that would address a critical healthcare provider shortage by collaboratively training more physicians, pharmacists, and allied health professionals. The project also needed to create a signature home for the newly established UA College of Medicine, and support its inter-professional, team-based learning approach.

Jonathan's collaborative programming process focused on space use instead of discipline, resulting in a shared program that includes learning studios, interactive lecture halls, a regional simulation center, gross anatomy labs, learning resources center, student-life spaces, and administrative workplaces. With faculty recruitment and curriculum development still in-progress, Jonathan's benchmarking and space standards aided the client's decision-making process. His scheduling and room utilization study helped 'right-size' the program, and confirm the potential to share space. Although the project budget was reduced three times, Jonathan adjusted the program to successfully minimize impact to the education mission. HSEB has received more awards than any other project in the University of Arizona system, including AIA national, regional, and local accolades.

"Jon Kanda helped us to create one of the most beautiful and functional medical education buildings in the country. With Jon's leadership and expertise, this building was designed to foster learning in new models, educate the physicians of tomorrow and to serve as a magnificent bridge between art and medicine. Thanks to Jon and his expertise, we were able to achieve all of that and more."



**Stuart D. Flynn, M.D.**, Dean, UNTHSC/TCU Medical School (Former Dean, University of Arizona College of Medicine – Phoenix)

#### Select Awards

#### AIA - National

2015 Design Excellence Award, AIA-CAE 2013 Stellar Architecture Using BIM , AIA TAP BIM Awards

#### AIA - Regional

2013 Merit Award for Architectural Design, AIA Western Mountain Region 2013 Honor Award for Architectural Design, AIA CC

2012 Marit Award for Architectural Design, AIA Arizo

2013 Merit Award for Architectural Design, AIA Arizona

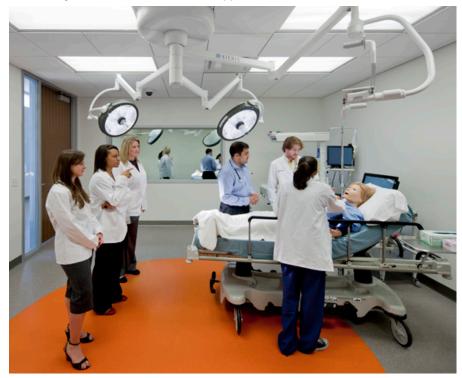
#### AIA - Local

2010 Citation, Next LA Awards, AIA Los Angeles

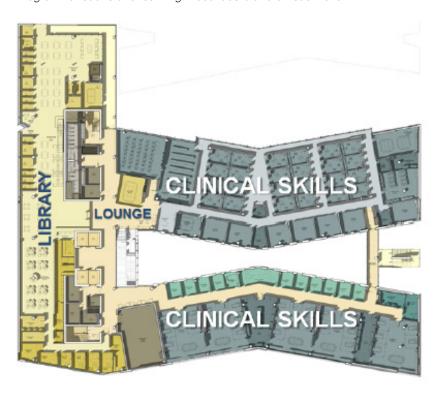
#### Institutional Awards

2014 American Architecture Award, The Chicago Athenaeum Museum of Architecture & Design

Flexible, "generic" simulation rooms support all levels of learners.



Program functions and learning modalities blend on each level.







Stairway integrate informal seating areas to encourage use and interaction

Select Media and Publications

"Cool Spaces! The Best New Architecture"

PBS Television Series, 2014

"Back to School: Design lessons from the world's smartest education centers"  $CNN\ Style,\ 09/2016$ 

"A New Model in Healthcare Education"

School Construction News, 01/2013

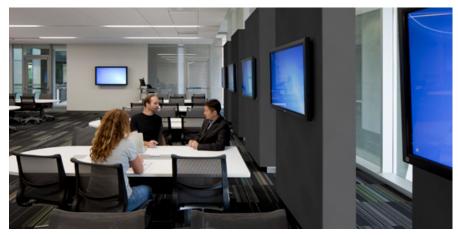
Jonathan conceived the flexible Skills Loft, providing students with access to collaboration space, skills trainers and simulation technologies.



Ample social learning spaces support informal learning & collegiality.









60-person Learning Studio

Ubiquitous technology and drop-in collaboration space.

### **Declaration of Responsibility**

I have personal knowledge of the nominee's responsibility for the exhibit listed above. That responsibility included:

Project under direction of nominee
 Nominee's firm executed project
 Other: Programming, Simulation Specialist

Nancy Tierney / Assistant Vice President for Health Affairs, Univ. of Louisville Health Sciences Center (Former Associate Dean UA College of Medicine - Phoenix) (role: client, executive direction)

### Claude Moore Medical Education Building

Exhibit 4

University of Virginia School of Medicine

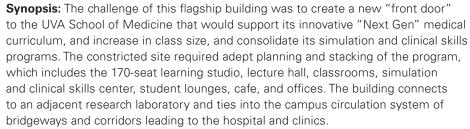
Architecture Firm of Record: CO Architects

**Design Firm:** CO Architects

Completion: 2010

Role of Nominee: Project Director, Simulation Specialist





Jonathan led all phases of the project, programming and designing the large learning studio and simulation/clinical skills centers. Both are hallmarks of the school and have influenced numerous medical school projects in the US. At its completion the learning studio was the largest of its kind in the US. **UVA has received a record number of applications since the building's completion.** 



The Learning Studio trains the entire medical school class of 170 students.

#### Select Publications

"Adjusting the Prescription: The School of Medicine Overhaul Its Century-old Educational Approach"

University of Virginia Magazine

"Claude Moore Medical Education Building at UVA"
Architype Review

"The New Face of Learning: The UVa School of Medicine" K12Albemarle Wordpress.com

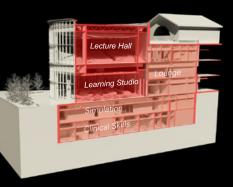




Simulated Operating Room



The flexible Simulation center can emulate a wide range of clinical environments.





Clinical Skills Exam Room

Student Lounge Program Stacking

### **Declaration of Responsibility**

I have personal knowledge of the nominee's responsibility for the exhibit listed above. That responsibility included:

Project under direction of nominee
 Nominee's firm executed project
 Other: Programming, Simulation Specialist

David J. Neuman, FAIA / Former Architect for The University of Virginia (role: client, executive direction)

### Paul L. Foster School of Medicine

Exhibit 5

Texas Tech University Health Sciences Center - El Paso, Texas

Architecture Firm of Record: CO Architects

**Design Firm:** CO Architects

Completion: 2007

Role of Nominee: Project Director, Programmer



**Synopsis:** The unprecedented challenge of this project was to program and design a new facility for a start-up medical school while its curriculum, faculty recruitment, and operational structure were still in development.

Jonathan approached this obstacle by working alongside the school's curriculum team and studying the proposed coursework and cohort group sizes. He also engaged "surrogate" expert users, such as a leading UCLA anatomist, to verify his planning ideas. The completed facility houses various small group tutorial rooms, case study classrooms, simulation and clinical skills suite, anatomy lab, learning resources center, student society lounges, cafe, wellness center, and administrative offices. Widely visited and analyzed by other medical schools, educators, and design professionals, this project established programmatic benchmarks and standards that influenced other new medical schools in the US. One hundred new physicians graduate from the School of Medicine annually.

"Under the leadership of Jonathan Kanda, CO Architects demonstrated innovation and creativity in contributing to the built environment with the realization of the Paul L. Foster School of Medicine located in the border city of El Paso. This beautifully and masterfully planned facility has created a positive impact to the underserved area and has served as a catalyst for community engagement and great civic pride. As former Senior Project Manager for Texas Tech University System Facilities Planning at Construction, I remain sincerely grateful to have worked with Jonathan and his team and to have experienced this delightful endeavor come to fruition.

Ross John Narvaeth, AIA, Principal, BGR Architects, Inc.

#### Select Publications

"El Paso medical school offers lessons for Austin's effort" Statesman, April 2012

"Paul C. Foster School of Medicine students will learn theory, hands on applications"

El Paso Times, July 2009





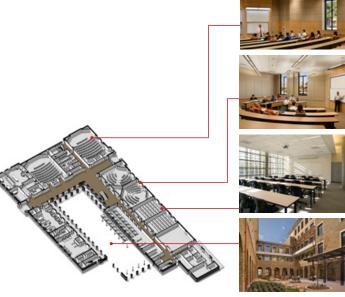


Jonathan modified clinical space standards to meet the unique educational needs of the medical school, particularly in the simulated practice environments

Jonathan optimized program adjacencies based on the student's daily schedule and a narrative with simulation in the "heart" of the building. Gross anatomy, is housed on the upper level to maximize daylight and security.

- 1. Classroom / Café
- 2. Small Group / Library
- 3. Simulation / Clinical Skills
- 4. Science / Gross Anatomy Labs
- 5. Mechanical
- 6. Services
- 7. Colleges





The ground floor contains lecture and learning studios, the café and fitness facility.

### **Declaration of Responsibility**

I have personal knowledge of the nominee's responsibility for the exhibit listed above. That responsibility included:

◆ Project under direction of nominee
 ◆ Nominee's firm executed project
 ◆ Other: Programming

William Adling, AIA / CEO, Adling Associates (Associate Architect) (role: associate architect)

### **Health Sciences Education Building**

Exhibit 6

University of South Carolina & Greenville Hospital System - Greenville, SC

Architecture Firm of Record & Design Firm: CO Architects

**Design Firm:** CO Architects

Completion: 2012

Role of Nominee: Project Director, Lead Programmer, Simulation Specialist



**Synopsis:** The challenge was to design an integrated medical education building for a unique, new start-up medical school based on a partnership between the University of South Carolina and the Greenville Hospital Health System. Known as the "Clinical University" model, students in medicine, pharmacy, and nursing are trained in a patient-centric, team-based care model on the Greenville Hospital campus.

Jonathan developed the program in tandem with the innovative curriculum, and was planned to fit within an existing three-story shell building structure adjacent to the main hospital. With a focus on team-based learning and clinical integration, this 90,000 SF facility includes a sophisticated clinical simulation center, learning studios, 160-seat interactive lecture hall, small group rooms, gross anatomy lab, learning commons, student lounges, cafe, public forum, study areas, and administrative offices. Jonathan led all phases of the project. The school annually graduates 106 new doctors, many of whom will practice in the underserved upstate region of South Carolina.

"Jon and his firm were the unanimous choice for our new Health Sciences Education Building. Jon literally defined the standards of this building type, but we did not get a cookie-cutter solution. He led us to create a transformative building -a new home- that embodies our vision to become the "Clinical University." It has enabled us to attract the best and brightest students and has received numerous benchmarking visits from national and international institutions.

Others have borrowed our ideas and I think we have become the new benchmark medical education model for the nation."

**Mark Loukides**, Executive Director, Facility and Campus Planning Greenville Hospital System

#### Select Publications

"Student Centric Design in Simulation Centers" – by Jonathan Kanda Health Facilities Management Magazine, September 2015

"Training Team-Skilled, Tech-Ready Medical Student" Tradelineinc.com, May 2014

"School of Medicine at the University of Soouth Carolina, Greenville" Tradelineinc.com, April 2014



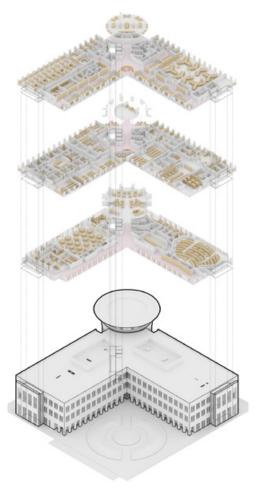
Jonathan integrated theatrical backgrounds and props to create low-cost, flexible simulated hospital environments





Students and experienced physicians practice side-by-side in the regional simulation center, and problem-solve in team-based learning studios.

The program was creatively designed into a shell building originally intended for a different function



### Learning Lab, Anatomy, Study Rooms, Student Lounge

### L2 Interprofessional Simulation Center, Classrooms, Study Rooms

Learning Studios, Collaborative Lecture Hall, Cafe, Info Commons, Public Forum



### **Declaration of Responsibility**

I have personal knowledge of the nominee's responsibility for the exhibit listed above. That responsibility included:

◆ Project under direction of nominee
 ◆ Nominee's firm executed project
 ◆ Other: Lead Programmer, Simulation Specialist

Mark Loukides / Executive Director, Facility and Campus Planning Greenville Hospital System (role: client, executive direction)

### Pioneering Medical Simulation Design

Exhibit 7

United States

Architecture Firm of Record: CO Architects

**Design Firm:** CO Architects **Completion:** 2004 – Present

Role of Nominee: Principal in Charge



**Synopsis:** Simulation is an experientially-based learning methodology that exposes students to high-risk activities in a low-risk, practice setting. A well-proven training tool used in the aviation industry, simulation has a much more recent history in the medical profession, gaining wide-spread use in only the last 15 years. Simulation facilities have also evolved substantially; often starting out in vacated space, today's simulation centers can be free-standing, technically-complex buildings. Simulation embodies the clinical-academic convergence in medical education.

Jonathan was one of the first architects to anticipate the need for distinct, specialized design expertise in the rapidly-evolving simulation field. Working alongside leading medical simulation educators, he has researched and developed space programs, standards, benchmarks, design features, utilization studies, and best practices for simulation facilities. Jonathan continues to evolve his ideas with emergent technologies, helping educators imagine and build the next generation of simulation environments. He willingly shares his knowledge with design professionals and educators, convinced that medical simulation will benefit society with better patient outcomes.

"I have had the opportunity to work with Jon on the University of Arizona's ambitious, interdisciplinary Health Sciences Innovation Building which will integrate a radical TV stage-based production set capability connected to the largest telemedicine network in the US. Together with Jon and his team we are designing a large, open, multiuse, multi-disciplinary "Sim Deck." It will be the new standard for 21st century simulation facilities to take full advantage of today's state-of-the-art technology while still offering maximum future flexibility. His in-depth knowledge of simulation facility design, in combination with a desire to help us forge new architectural ground with our Sim Deck, has made him an invaluable partner in our genuine desire to improve healthcare in the US and around the world."

**Dr. Allen J. Hamilton, MD, FACS,** Executive Director, Professor of Surgery Arizona Simulation Technology and Education Center

### Select Publications and Presentations

"Student Centric Design in Simulation Centers," by Jonathan Kanda

Health Facilities Management Magazine, 09/2015

"Simulation Center to Give Medical Students Authentic Experience"
Oregon Daily Journal of Commerce, 11/2012

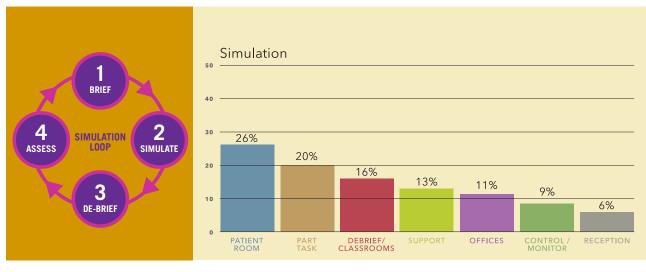
"The Inter-Professional Simulation Center: Critical Features for Success," MED-Ed Facilities Conference, 04,2014

### "Designing the SIM Center of the Future"

11th Annual International Meeting on Simulation in Healthcare, 01/2011

Working with medical simulation experts, Jonathan developed spaces, design features, and standards that support best practices in simulation training.

Mock Exam Room





Control Room



Part Task Training



Student Teams with Human Simulators

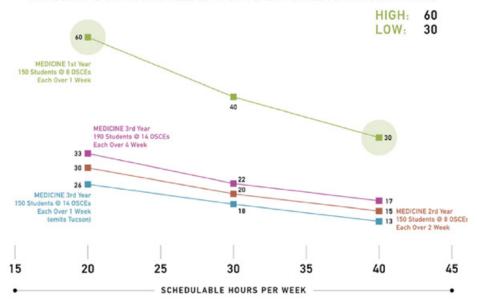


Jonathan Kanda AIA, LEED AP – 2017 AIA Honors Fellowship Submission

Simulation "clustering" is now widely used to support multiple learning groups in the same facility.

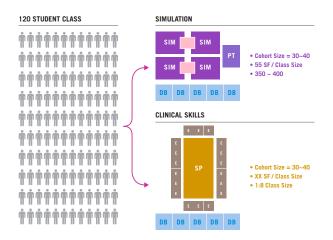


#### NUMBER OF EXAM ROOMS NEEDED AT DIFFERENT SCHEDULING ASSUMPTIONS



To support shared, inter-professional use, Jonathan's utilization studies help to "right-size" these costly facilities.

Jonathan's space standards, planning ideas, and benchmarks have become industry norms.





Jonathan's "bullpen" concept separates patient-actors and students until the simulated exam. This same concept is now being applied in real-life outpatient clinics.

### **Declaration of Responsibility**

I have personal knowledge of the nominee's responsibility for the exhibit listed above. That responsibility included:

● Project under direction of nominee ● Nominee's firm executed project ● Other: Simulation Design, Benchmarks, Space Standards

Thomas Chessum, FAIA / Principal, CO Architects (role: colleague witness)

### **Health Sciences Innovation Building**

Exhibit 8

University of Arizona Health Sciences - Tucson

Architecture Firm of Record: CO Architects

**Design Firm:** CO Architects

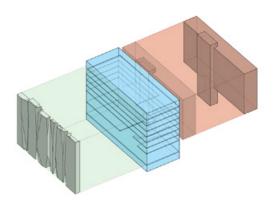
Completion: 2018, in construction

Role of Nominee: Principal for Programming and Planning, Simulation Specialist



Synopsis: This 220,000 SF facility will foster transdisciplinary collaborations between health professionals and other non-health fields to advance pressing health issues and improve team-based patient care. Currently under construction, the challenge is to create a campuswide "learning hub" shared by the Colleges of Medicine, Nursing, Pharmacy, Public Health, the Arizona Simulation Technology Education Center, Health Sciences Library, and ten research centers. Jonathan led interdisciplinary user groups to develop a cutting-edge, program that includes active instructional spaces, simulation and innovation, community life, information commons, research workplace, media production studios, retail and administrative offices. Unique innovations include:

- Long-span, adaptable column-free "lofts"
- Vanguard, flexible, "black box" simulation theater
- The Forum: a multi-purpose, transformable public environment for the campus, to accommodate social learning, community life, live events, and academic instruction.
- The Distributed Info Commons: librarians, study rooms, and learning resources are interwoven throughout the facility in lieu of being centralized and contained.



M.E.P. Stairs

Loft
Long Span Spa
Adaptable
Instructional

Porch Info Commons Social Space Study Rooms



### RESEARCH CENTER ADMINISTRATION ADMINISTRATION TERRACE TER. CLINICAL SKILLS INNOVATOR SPACE SIMULATION SIMULATION & INNOVATION TERRACE OPEN STUDY STUDENT LOUNGE TERRACE LEARNING STUDIOS QUIET STUDY TERRACE INSTRUCTIONAL LARGE LEARNING STUDIOS FOCUS INFO COMMON INFO COMMONS BOOKSTORE

The Porch: Study spaces, lounges, and Info Commons are linked vertically.

**Section Through Porch** 

The Forum: A transformable public venue.

**Section Through Loft** 

### **Declaration of Responsibility**

I have personal knowledge of the nominee's responsibility for the exhibit listed above. That responsibility included:

• Project under direction of nominee • Nominee's firm executed project • Other: Lead Programmer and Planner, Simulation Specialist

Angela M. Souza / Senior Director, Planning and Facilities University of Arizona Health Sciences (role: client, executive direction)

# References

### Jonathan Kanda AIA

### 1. David J. Neuman, FAIA

(formerly Architect for the University, University of Virginia) Founding Principal Neu Campus Planning Pier 9, The Embarcadero, Suite #107 San Francisco, CA 94111 Relationship: Campus Architect and Client

### 4. Reeves W. Wiedemann, FAIA

Founding Principal Helix Architecture + Design 1629 Walnut Street Kansas City, MO 64108 Relationship: Architect Collaborator

### 7. Randolph J. Canterbury, MD

Senior Associate Dean for Education University of Virginia School of Medicine 1215 Lee Street, #4580 Charlottesville, VA 22908 Relationship: Medical Education Dean and

Client

### 2. H. Scot Latimer, FAIA

Principal Latimer Health Strategies 3907 Ridge Road Evergreen, CO 80439 Relationship: Architect Collaborator

### 5. Ann Rolland, FAIA

Principal **FXFOWLE Architects** 22 West 19th Street New York, NY 10011 Relationship: Architect Collaborator

#### 3. John C. Gaunt, FAIA

Professor and Former Dean School of Architecture, Design & Planning University of Kansas 1465 Jayhawk Blvd., Room 410 Lawrence, KS 66045 Relationship: Client Architectural Advisor

### 6. Nancy Tierney

(formerly Associate Dean, Facilities and Planning, University of Arizona College of *Medicine-Phoenix)* Assistant Vice President for Health Affairs University of Louisville Health Sciences Center Facilities Planning and Management Louisville, KY

Relationship: Medical School Client

