

Kaleida Health, Gates Vascular Institute and UB Clinical Translational Research Center

Buffalo, NY



SQ FT
476,000 BGSF



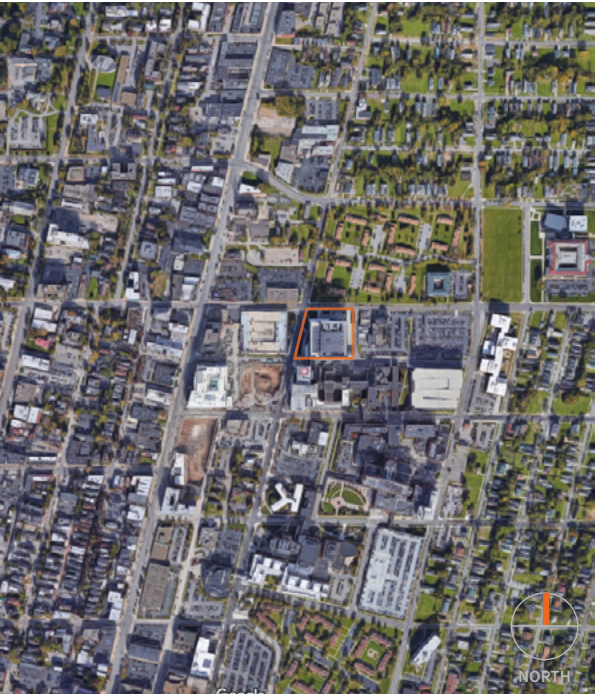
OWNER/AFFILIATION
Kaleida Health and
State University of
New York at Buffalo



ARCHITECT(S)
Cannon Design



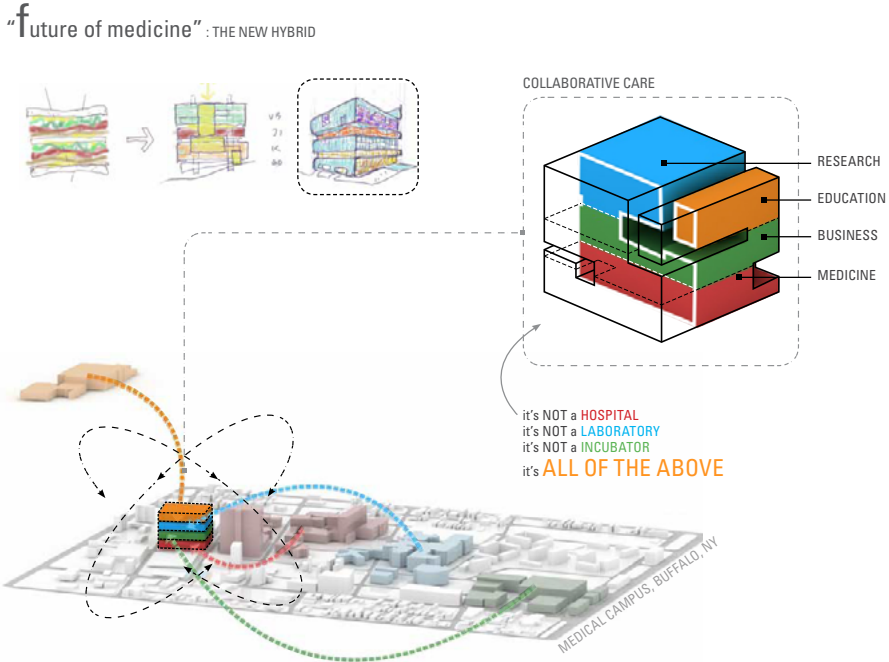
COMPLETION DATE
2012



SITE MAP

ABOUT | DESIGN INTENTIONS

Both Kaleida Health and the University at Buffalo (UB) recognized that increasing multidisciplinary collaboration and accelerating the bench-to-bedside cycles for medical breakthroughs would require a fundamental change in culture. In collaboration with these organizations, **they undertook in-depth research into how design could integrate the full cycle of translational processes and accelerate discoveries for both entities.** The result is a one-of-a-kind facility planned as a cornerstone of a world- class academic medical center in downtown Buffalo.



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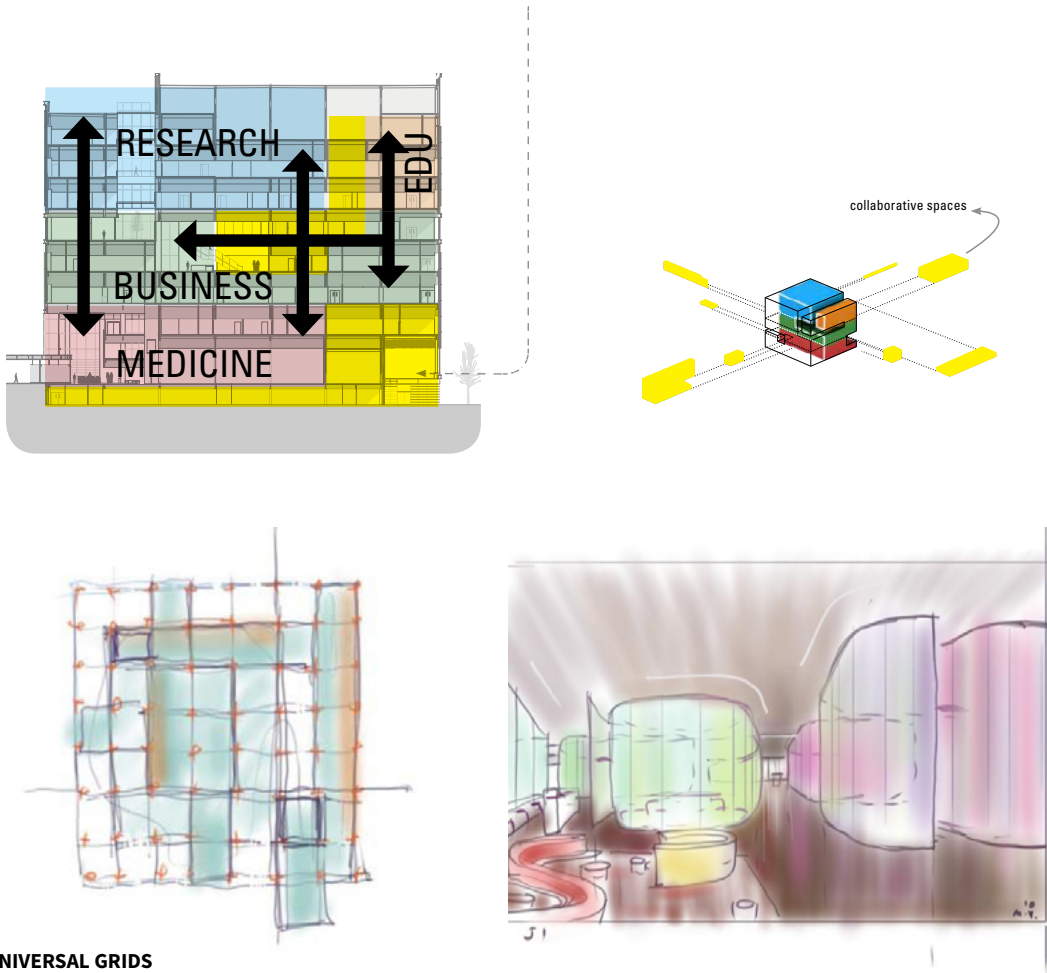
DESIGN STRATEGIES

Stacking

The facility achieves these goals by **stacking a translational research building over a clinical vascular institute**. The first four floors of this 10-story “vertical campus” house the Gates Vascular Institute (GVI), with the Clinical and Translational Research Center (CTRC) occupying the top half of the building. Sandwiched between the two is a two-level “collaborative core”—the “binder” that connects doctors and researchers from varying specialties to meet in a variety of dynamic situations to accelerate medical discoveries— moving science from the bench to the bedside.

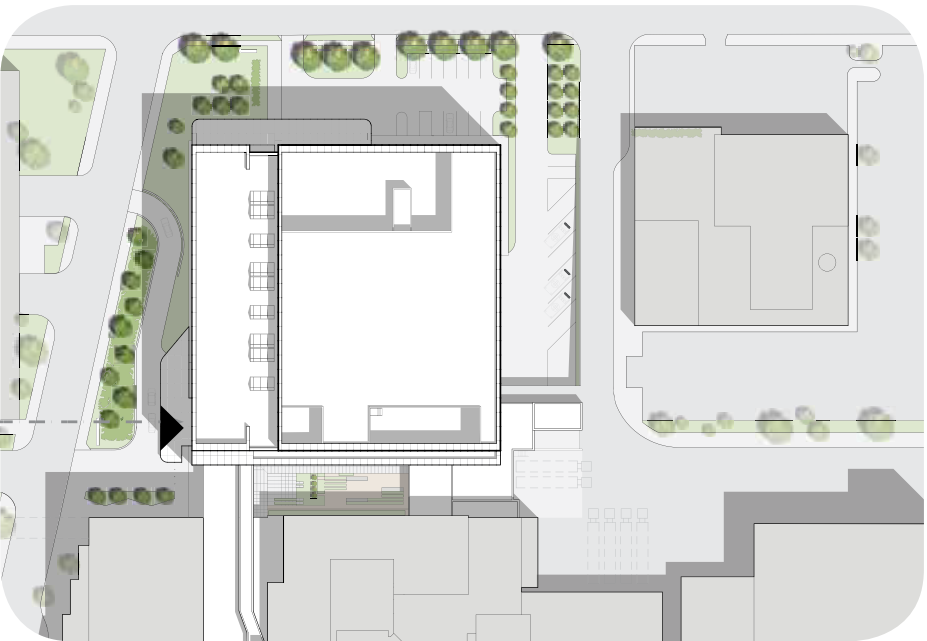
Flexibility

For maximum flexibility to **accommodate future medical and research innovations**, the structure is designed as a cube, with a **universal grid structural system, 18-foot floor-to-floor heights, and stairs and vertical shafts placed on one side**. The cube itself is wrapped on two sides with fritted glass that captures the spirit of energy and innovation. Baffles shade the glass curtainwall to the east and west to control heat transfer while admitting natural light. The flowing ribbons on the exterior convey a futuristic feel, but also allude to the study of vessels, appropriately. Inside, a modern design aesthetic mirrors the curvilinear form of the exterior and is filled with creative lighting, focal points, bright colors and warm woods that counter play with the crisp neutrals of the building palette.



UNIVERSAL GRIDS

SITE PLAN



ENTRY/LOBBY

DESIGN STRATEGIES

Pods Design

The GVI boasts a “hotel” comprised of **62 private patient rooms arranged into four nursing pods—each capable of independent operation, but flexible enough to work together** with adjacent pods over the ebb and flow of patient volume. The “hotel” creates a more restive environment distinct from the active treatment areas. **The GVI also features 59 exam rooms, five admissions offices, 16 intensive care beds, seven surgery rooms, and numerous patient and family amenities.** The perimeter of the building is designed to admit abundant natural daylight. These architectural responses, combined with an approach akin to a concierge desk, provide the positive first and last impressions so vital to patient and family satisfaction.

Designed to handle 60,000 patient visits per year, GVI’s state-of-the-art Emergency Department features a spacious main waiting room, accommodating up to 90 people, with direct elevator access for immediate vertical transport of patients into procedure labs and operating rooms. **Located adjacent to the imaging department with CT scan technology, the ED features 53 private patient rooms in four separate pods, two dedicated, state-of-the-art** diagnostic x-ray machines, overhead electronic files for safe patient handling and dedicated space with waiting rooms for behavioral health patients.

Buffalo, NY

DESIGN STRATEGIES

Sandwiched between the GVI and the CTRC is the “collaborative core,” containing education, catering and conference facilities, linked by multiple height atrium spaces. Included within the core is a 4,000 sf business incubator—part of the “binder” connecting doctors, researchers and entrepreneurs to meet in a variety of dynamic situations to accelerate medical discoveries—moving science from the bench to the bedside.

Occupying the top half of the building, the CTRC offers 170,000 sf of dedicated laboratory space, advanced imaging facilities; a bio-repository and a clinical research center, biomedical laboratories, specialist research facilities for biomedical engineering, physiology and angiography, and dry laboratories for epidemiology and biostatistics. Design features such as open-plan laboratories, put researchers side-by-side, when traditionally they would be isolated in individual labs. **The goal is to break down the “silos” that result when researchers in one discipline are isolated from researchers in another discipline.** This design of the New Scientific Workplace encourages the exchange of ideas and collaboration between researchers in different areas of inquiry.

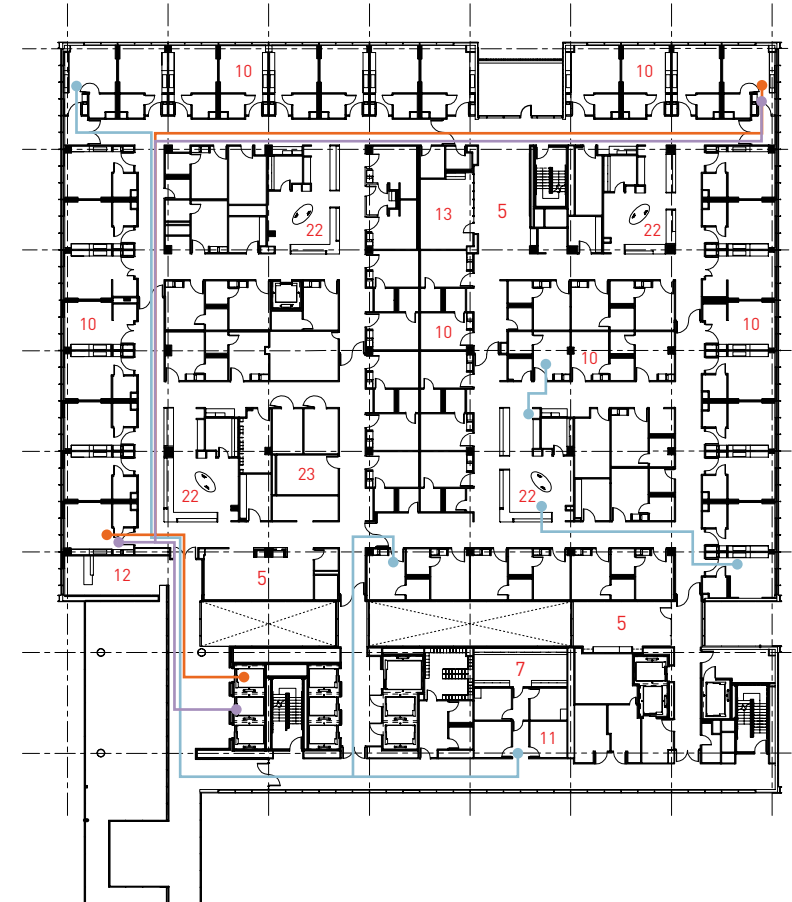
KEY SPACE :

Patient Care	11,191 SF
Registration/Waiting	257 SF
Lounge	992 SF
Conference Rooms	532 SF
Offices	624 SF
Nurse Station	1,540 SF

GROUND LEVEL:



TRAVEL DISTANCE ANALYSIS



KEY SPACES:

- ▶ Patient Rooms (190sf)
- ▶ Nurse Station (360 - 420sf)
- ▶ Consult Rooms (66-75 sf)
- ▶ Meeting Rooms (285- 532sf)

DEPARTMENTAL GROSS SQUARE FOOT TAKE-OFFS Net

TAKE-OFFS	Net	Gross
Patient Care	18,013 SF	23,506 SF
Registration/Waiting	242 SF	257 SF
Staff Work Area	2102 SF	2164 SF

TRAVEL DISTANCE ANALYSIS

- Patient 72ft - 314ft
- Family 72ft - 314ft
- Staff Nurse Station: 34ft - 62ft; Office: 126ft - 292ft

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"CannonDesign has created a place that will fundamentally transform our academic medical enterprise. The unique combination of interdisciplinary scientific and healthcare facilities will not only enable us to attract and retain the very best physician scientists, but provide a springboard to the new partnerships and income streams so necessary to compete effectively at a national and international level. Design Challenges Programming/planning/design process."

-----Michael E. Cain, MD, Dean, School of Medicine & Biomedical Sciences, University of Buffalo

PROJECT SUMMARY:

Project: Kaleida Health Gates Vascular Institute
Project location: Buffalo, NY
Owner/Client: Kaleida Health and State University of New York at Buffalo
Architect: Cannon Design
Construction manager:
Turner Construction (GVI) and LPCiminelli (CTRC)
Photographs/Illustrations:
Photographs K C Kratt, Bjorg Magnea
Architectural & Interior , Thomas Mayer,
Greg Meadows, Tim Wilkes
Construction cost: \$291,000,000
Building area GSF: 476,000 SF
Cost per square foot: \$611/SF



AIA/AAH DESIGN AWARD WINNER

Category: Innovations in Planning and Design Research, Built and Unbuilt

JURY COMMENTS

► The spirit of collaboration was the driving force uniting Kaleida Health and the University at Buffalo within a single structure, and the building strives to bring several disciplines and its patients, surgeons and researchers, together to exchange knowledge and ignite innovation. The 476,000-square-foot facility achieves this by stacking a translational research building over a clinical vascular institute. The first four floors of this 10-story “vertical campus,” house the Gates Vascular Institute, with the Clinical Translational Research Center occupying the top half of the building. Sandwiched between the two, is a two-level “collaborative core”—the binder that connects doctors and researchers from varying specialties to meet in a variety of dynamic situations to accelerate medical discoveries—moving science from the bench to the bedside.

