

***ADVANCING RESEARCH,
ENABLING EXCELLENCE***





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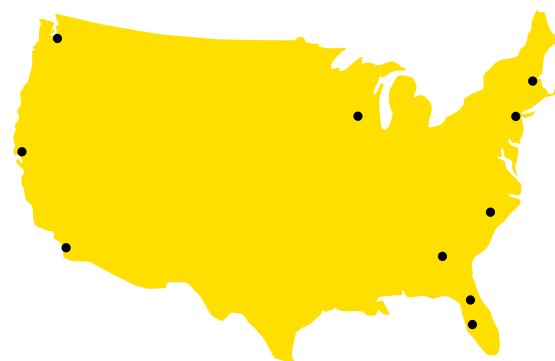
**WHO
WE ARE**

FIRM AND EXPERTISE

95+

years of experience in planning and architecture

we create environments that enhance human potential®



320+

dedicated staff to serve our clients

10

offices nationwide

Atlanta, GA · Boston, MA · Gainesville, FL · Madison, WI · New York, NY
Raleigh, NC · San Diego, CA · San Francisco, CA · Seattle, WA · Tampa, FL

30+

planners: laboratories, healthcare

Strategic and Master Planning

Programming and Campus Planning

Academic, Research and Medical Planning

Site Planning and Landscape Architecture

Architectural Design

Structural Engineering

Interior Design

350+

design awards

National Rankings

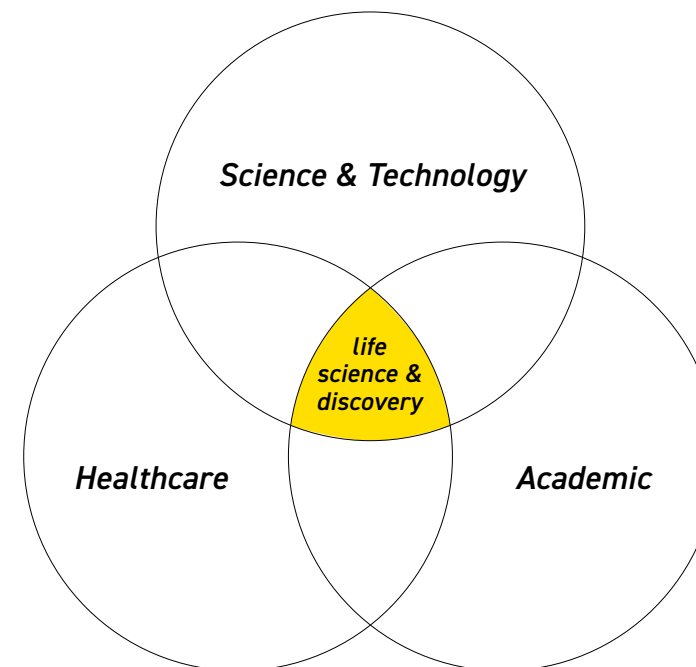
Building Design+Construction Giants // 2025

- 20 Overall
- 2 Laboratory Architecture
- 5 Science & Technology

350+

design awards

- 100 AIA Awards
- 39 IIDA Awards
- 8 Lab of the Year Awards
- 5 ISPE Facility of the Year Awards



SUSTAINABLE DESIGN

Becoming an industry leader by incorporating people, planet, and prosperity into all designed environments

We are committed to transforming how buildings are designed and built to support sustainability, resiliency, and human wellness. Regardless of whether clients seek certification, we encourage incorporating safe, healthy, and quality materials and offer sustainability visioning, energy modeling, and life-cycle cost analysis. As evidence of our focus, we have endorsed The 2030 Challenge to achieve dramatic reductions

in greenhouse gas emissions, reaching toward carbon neutrality on all of our projects by the year 2030.

Flad was an early adopter of the Leadership in Energy and Environmental Design standards, achieving several LEED firsts for the research, science, and healthcare facilities in which we specialize.



Recognized Industry Firsts

- ⤵ **International WELL Building Institute**
Gold Core and Shell Certification
Kilroy Realty Corporation,
The Exchange on Sixteenth Street
- ⤵ **LEED® Platinum Laboratory in New York**
Stony Brook University
- ⤵ **LEED® Gold Research Institute in Seattle**
Seattle Children's Research Institute,
Building Cure
- ⤵ **LEED® 2.2 Gold Laboratory**
Johnson & Johnson
- ⤵ **LEED® BD+C: Core and Shell Platinum***
BioMed Realty, Gateway of Pacific
Phase 1
- ⤵ **LEED® Platinum Process Science Facility**
University of California, Davis
- ⤵ **LEED® Gold Laboratory**
Pharmacia

* Highest certification level recognized by the USGBC

RESEARCH INSTITUTES EXPERIENCE

Advancing discovery through purposeful design

Flad's planning and design solutions reflect an understanding of how people work and interact, helping organizations devoted to discovery, healing, and learning do what they do best. Our dedication to outstanding client service and technical excellence has resulted in enduring relationships and repeat assignments for diverse clients across the nation.

Our portfolio showcases a profound understanding of the specialized needs and challenges of research institutes. Prioritizing adaptability in our work, we support institutions in achieving the highest and best use of resources. This approach extends to enhancing recruitment, strategically right-sizing building and user needs, and innovative approaches to existing infrastructures.

With offices strategically positioned across the United States and a global project footprint exceeding billions of dollars, our emphasis remains on individual client relationships. At Flad, we cultivate collaborative environments, where we listen, support, and seamlessly incorporate strategic goals for each project. This client-centric approach extends to integrating artificial intelligence into research settings, championing sustainable design principles despite budget constraints, and delivering innovative, forward-thinking solutions that advance our clients' missions.

NORTHWEST

- Confidential Bioscience Research Client
- Fred Hutchinson Cancer Center
- Seattle Children's Research Institute

MIDWEST

- Donald Danforth Plant Science Center

NORTHEAST

- Boyce Thompson Institute
- The Jackson Laboratory
- Johns Hopkins University
- National Institutes of Health
- Northwell Health Feinstein Institutes for Medical Research

WEST

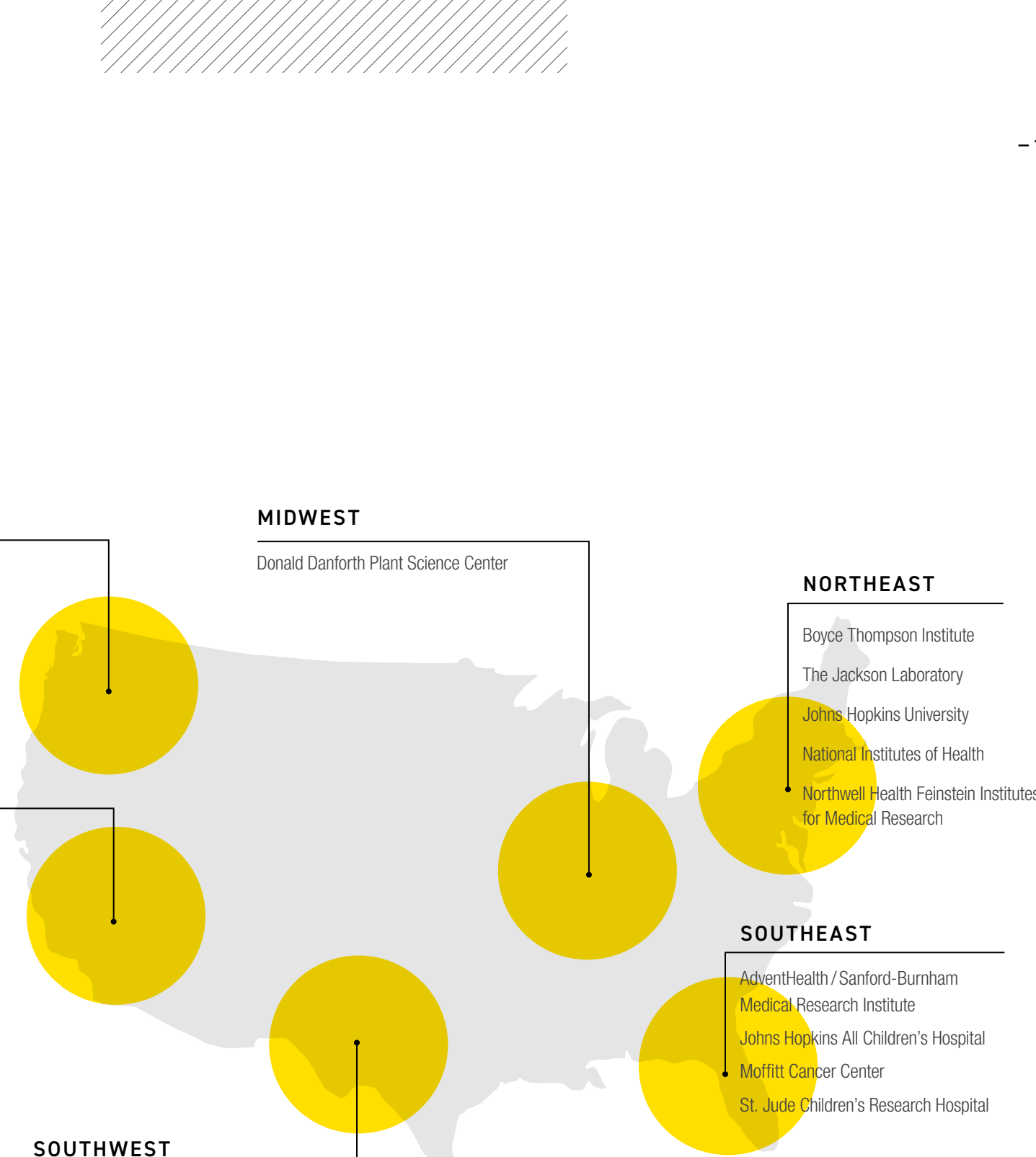
- Monterey Bay Aquarium Research Institute
- UCLA Institute of Immunology

SOUTHEAST

- AdventHealth / Sanford-Burnham Medical Research Institute
- Johns Hopkins All Children's Hospital
- Moffitt Cancer Center
- St. Jude Children's Research Hospital

SOUTHWEST

- Texas Biomedical Research Institute





HOW WE WORK

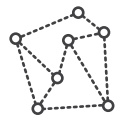
LIVING OUR VALUES



We honor the creative spirit and innovation in all things.



We foster an environment of trust, integrity, and respect.



We embrace both individual initiative and collaboration.



We are trusted partners to our clients.



We are committed to the health and well-being of our communities and the planet.

In partnership with leading research organizations, universities, healthcare institutions, and science-based companies, we design beautiful, innovative environments that enable our clients to make revolutionary discoveries that have a profound impact on society. We are dedicated to providing exemplary service to our clients. Fostering this collaborative approach allows us to challenge

assumptions, solve unique problems, and help our clients achieve their mission through the lens of design. Our environments are an extension of our client's enterprise, celebrating their talent and reinforcing their brand and culture. Our solutions are customized, mission-driven, and transparent – increasing efficiency, productivity, and identity.



UNIQUE ATTRIBUTES

Flad offers a specialized understanding of the intricacies of research institutes, recognizing and addressing the nuances of their dynamics, including:

Commitment to Mission

- Philanthropic and family foundations
- Disease focused

Partnerships and Innovation

- Collaboration with researchers and academia
- Pipelines for innovation
- Utilization of core facilities at academic institutes to drive advancements

Efficiency in Space Utilization

- Optimizing space use for maximum impact
- Practical solutions to enhance efficiency

Translation of Therapies and Cures

- Partnerships with health sciences, healthcare systems, and researchers
- Genetic studies to precision medicine
- Network building

Education as Cornerstone Mission

- Inspire learning for student groups
- Education initiatives, outreach programs, classroom labs

Nonprofit Fiscal Responsibility

- Emphasis on nonprofit principles
- Utilizing funds judiciously to maximize impact





ADDRESSING CHALLENGES

Flad's strategic planning and design approach includes a deep understanding of the challenges and complexities faced by research institutes, including:

Optimizing Space and Resources

- Balancing modern facilities with budget constraints
- Considerations between owning vs. leasing spaces
- Establishing benchmarks for efficient space utilization
- Optimizing shared resources and cores



Competing for Talent in a Nonprofit Setting

- Highlighting reputation and quality of work as key attractions
- Emphasizing quality in workplace environments in recruitment efforts

Modernizing Campus-Wide Facilities

- Tackling the dilemma of outdated buildings
- Adapting to industry trends while addressing specific facility needs

Balancing Security and Openness

- Crafting inviting yet secure campuses
- Displaying research while maintaining integrity
- Considerations for special use spaces

Funding and Fundraising

- Sourcing funding from foundations, donations, and grants
- Creating effective fundraising materials
- Diverse fundraising approaches

Contract Work and Specialized Research

- Navigating regulatory compliance for contracting specialized research
- Enhancing research spaces for interdisciplinary collaboration
- Verifying facilities can support advanced technology

EMBRACING TRENDS

As the landscape of research environments continues to evolve, being mindful of current trends is essential in planning and designing spaces that meet current needs while anticipating future requirements. Here, we highlight key trends shaping research environments today.

Evolution of Research Needs

- Adaptive reuse strategies emphasizing flexibility for various research types
- Integration of shared, specialized spaces and dry/computational labs
- Prioritizing the highest and best use of all available space

Integration of AI in Research

- Infrastructure to support future technology
- Creating space and equipment efficiency through AI
- Implementation of innovative technology
- Maximizing the potential of AI in life sciences

Addressing Labor Shortages with Technology

- Use of technology to bridge staffing gaps and overcome chronic labor shortages
- Enhancements in research efficiency through integrating technology

Sustainability Initiatives

- Unwavering commitment to sustainability despite budget constraints
- Growing focus on achieving carbon neutrality



RESEARCH INSTITUTE PROJECTS

	Planning & Programming	Lab Planning	Architectural & Interior Design	Oncology & Disease Research	Translational Research	Advanced Therapeutics	Flexible Research Labs	High Containment / BSL-3	cGMP Manufacturing	Computational Labs	Shared / Core Spaces	Workplace / Office Environments
AdventHealth / Burnham Institute Translational Research Institute for Metabolism and Diabetes		●	●	●	●		●			●		
Boyce Thompson Institute Plant Science Building	●	●										
Donald Danforth Plant Science Center Research Center Expansion	●	●					●				●	●
Confidential Cancer Research Center Scientific Workplace Transformation	●	●	●	●		●	●	●			●	●
Confidential Biomedical Research Institute New Research Center	●	●	●	●	●	●	●			●	●	●
Johns Hopkins All Children's Hospital System Facility Master Plan	●											
Johns Hopkins University Center for Translational Molecular Imaging			●		●	●			●	●		
Moffitt Cancer Center Campus Master Plan and cGMP Cell Therapies Facility	●	●	●	●	●	●			●	●		
Monterey Bay Aquarium Research Institute Multiple Projects		●	●				●				●	●
National Institutes of Health Multiple Projects	●	●	●	●	●		●	●		●		
Northwell Health Feinstein Institutes for Medical Research, Partial Renovations	●	●	●	●		●	●	●			●	●
Seattle Children's Research Institute Building Cure	●	●	●	●	●	●	●	●	●	●	●	●
St. Jude Children's Research Hospital cGMP Clinical Manufacturing	●	●				●	●	●	●			
Texas Biomedical Research Institute Multiple Projects	●			●		●	●	●			●	●
Confidential Biomedical Research Institute Research Park Tenant Improvements	●	●	●	●	●	●	●			●	●	●

EMBRACING TRENDS

We understand the criticality of our role in building consensus and confirming decision makers have data-driven information available to provide direction. The tools we employ must capture comprehensive thinking brought forward as salient, accessible, and useful information.

Benchmarking Database

- Over 16 million square feet of completed projects across academic, research, and healthcare institutions
- Leverage historical, peer, and industry metrics
- Predictive analysis and projection of future needs

Stakeholder Input and Engagement

- Variety of survey platforms to collect and analyze space occupant data, utilization rates, productivity and efficiency, satisfaction, etc.
- Project websites to boost awareness and inclusion

Sensor Technology

- Compare actual occupancy to benchmarks, target metrics, and other datasets
- Inform space allocation guidelines and policy frameworks

Resilience Toolkit

- Investigate climate change risk and mitigation
- Integrate community and equity factors

Computational Design

- Environmental analysis and simulation of conditions (solar, thermal, etc.)
- AI-enhanced design outcomes
- Generative design to optimize option development and recommendation

Interactive Dashboards

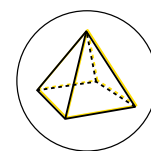
- Real-time data visualization
- Model impact of future growth, targets, and performance indicators
- Comparative metrics



Space Utilization >>



Data Innovation >>



Computational Design >>



SCALES OF PLANNING

Global Network

- Optimize and diversify sites and real estate portfolio
- Build regional growth and capacity
- Strengthen social and climate resiliency
- Infuse company values and culture across multiple sites

Integrated Campus

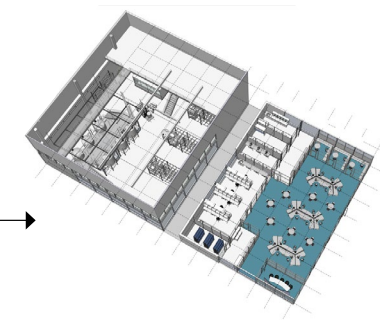
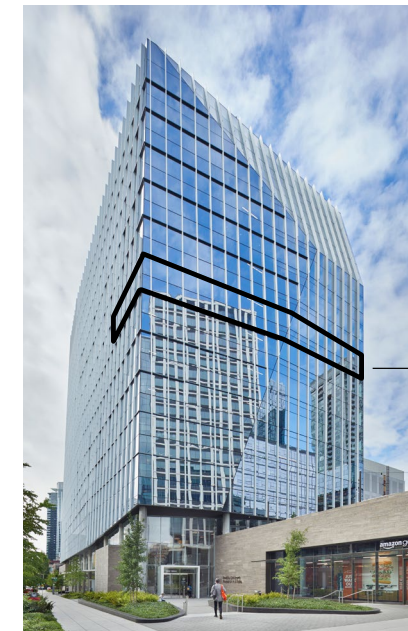
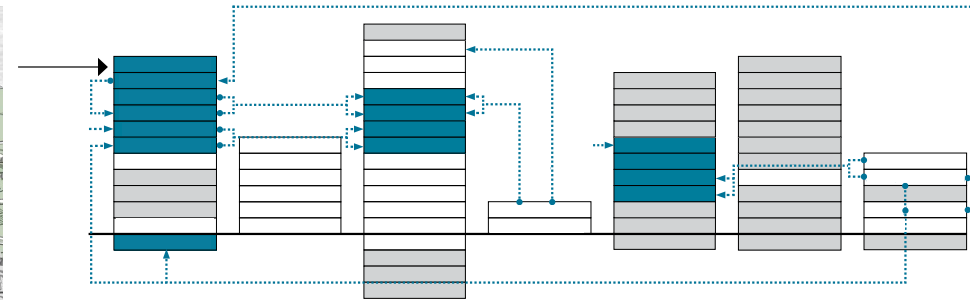
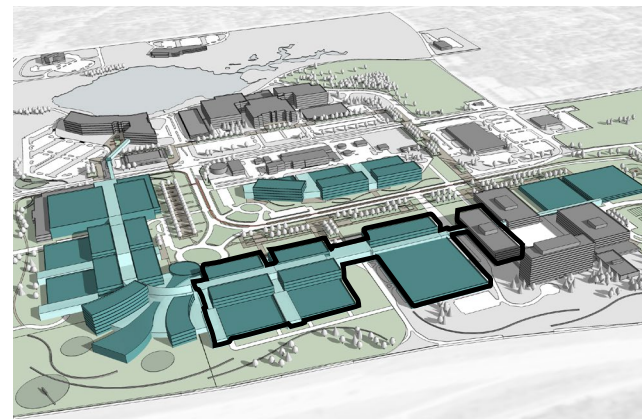
- Assess suitability and highest and best use of facility assets
- Plan phased expansion strategies tailored for greenfield sites
- Document implementation plan for near-, mid-, and long-term development
- Improve the campus experience and sense of place
- Achieve decarbonization targets

Shared Resources & Cores

- Measure and improve space utilization
- Analyze synergies and optimize program sizes to boost efficiency
- Modernize facilities to increase appeal and relevance for recruitment
- Reimagine potential reuse to preserve historically or culturally significant spaces
- Evaluate initial and life-cycle costs to support resource stewardship

Flexible Module

- Build for flexibility, adaptability, and change over time
- Implement guidelines and best practices
- Reapportion space to meet new ways of working and teaming structures
- Create nodes for interaction and innovation





SELECT PROJECTS

fluid inspiration



Facing generational changes in expectations for lab research environments, this nationally recognized cancer research institute sought to grow in place while honoring its history in shaping a culture of innovation around its lakefront location. In support of this mission, Flad designed the transformation of 50,000 square feet of space, revitalizing facilities not formerly committed to science, while offering new thinking about placemaking, belonging, and connection.

The renovated facilities bring the current evolution of research environments typically seen in higher education environments into a present-day research institute, with collaboration zones offering many varieties of tools for innovation. The state-of-the-art laboratories provide researchers top-tier facilities, while both the laboratories and support spaces offer visual connectivity among interior spaces and access to the site's exceptional waterway views.

Reinforcing group unity, culture, and place, research teams have specially designated spaces to display their mission with identity, pride, and belonging now leading their story.

Programmatic Components

50,000 SF
Scientific Workplace Program
Office / Conference / Amenity
Laboratory Program

[View the video >>](#)



responding to changing research needs



The Flad team has designed a landscape of wet and dry research space that positions this research institute for decades of groundbreaking research. The program outcomes will result in interactive research communities on each floor of this LEED Gold building that respond immediately to agile scientific discoveries and accelerate the delivery of successful cures. Our design fosters rapid cross-pollination throughout the building, connecting these interior communities together to readily respond to changing research needs in the areas of cancer immunotherapy, neuroscience, child health and behavior, and bioethics.

The Therapeutic Cell Production Center (TCPC) incorporates a cGMP suite for cell culture and purification of immunotherapy drug products in clinical trial Phases I and II. Cell production lots are small volumes using state-of-the-art disposable technologies. The suite has ten production rooms and support areas at ISO 7 classification. An adjacent viral vector production suite of two ISO 7 rooms is serviced by a discrete set of gowning rooms and an air handling unit. Quality control labs and production document areas dedicated to the TCPC area are also located in efficient proximity on the same floor.

Programmatic Components

540,000 SF
Laboratory Program
Scientific Workplace Program
Office / Conference / Amenity

Flad and Aedas co-led this project, with Flad serving as Architect of Record for all scientific workplace and research space, and Aedas serving as Architect of Record for the building exterior and interior public space.



creating an inspiring and invigorating identity



The Boren Tenant Fit-Out provides Seattle Children's Research Institute (SCRI) with an additional four floors of research space in their downtown campus in the Boren Building. Designed to support SCRI's high standards and commitment to its researchers, the new, high-performance research facility includes robust, efficient labs; comfortable, functional, and flexible work areas; and an inspiring and invigorating environment for tackling childhood diseases.

The third and fourth levels house the Center for Global Infectious Disease Research (CGIDR), and level six houses the Center for Respiratory Biology and Therapeutics (CRBT). The fifth floor houses shared spaces serving both groups, such as glasswash, shipping and receiving, and additional space for future expansion.

Each floor features open lab bench areas along the east curtain wall with offices lining the west curtain wall with shared support rooms in between. The open lab zone includes a wet wall with sinks, emergency eyewash/shower stations, and common lab utilities. Every floor provides tissue culture suites, plus imaging, microscopy, cold room, hot lab, and darkroom spaces. The project adds two specialized Arthropod Containment Level 2 insectary suites – one for human and rodent malaria research and the other a cGMP facility for vaccine development.

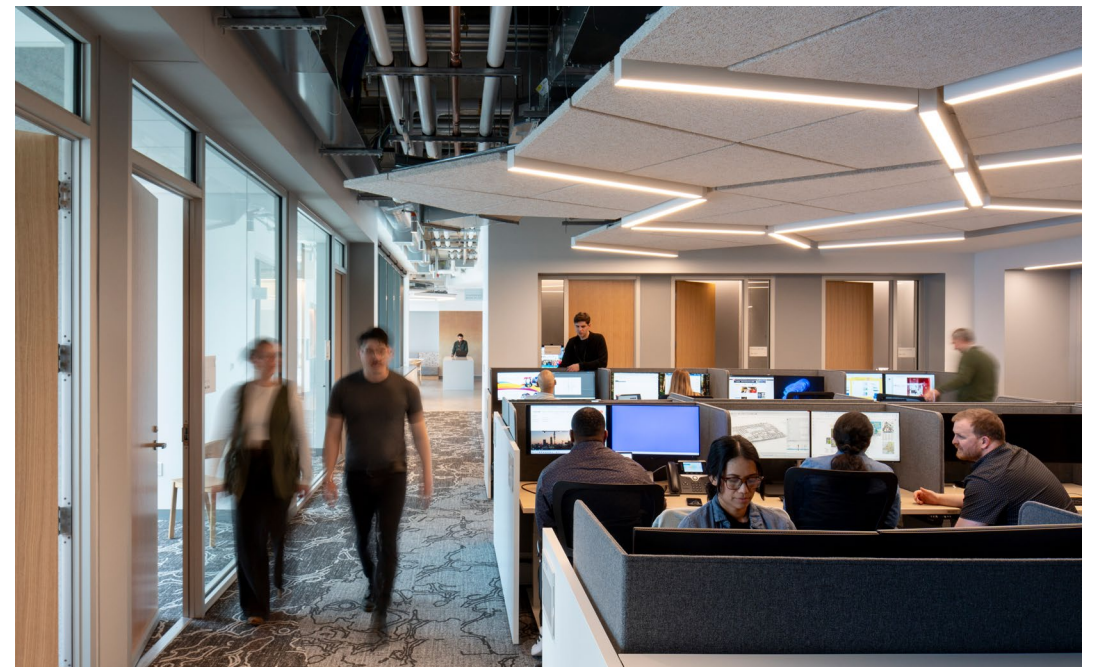
Open-office seating and private offices are supported by shared conference rooms, focus rooms, and a kitchen with an adjacent exterior terrace.

Programmatic Components

98,500 SF

Laboratory Program

Scientific Workplace Program



cutting-edge engineering and research



The Monterey Bay Aquarium Research Institute (MBARI) uses cutting-edge engineering technology to support biological, chemical, and physical science research in a deep-water ocean environment. To support the evolving needs of MBARI's scientific and engineering programs, the organization decided to pursue new facilities.

Building G is a 31,900-square-foot research and development building constructed on MBARI's campus in Moss Landing. Activities in the building include scientific research, flexible spaces for dry labs, instrument development and preparation, and research platform engineering and assembly, all areas that serve the core function of the organization.

The conference rooms and the large multimedia rooms have waterfront views, and the building is located across the street from the research vessel docks.

The building was planned to accommodate sea level rise from the ocean side and FEMA flood zones on the landward side, all relevant to construction on the harbor/oceanfront campus.

Programmatic Components

- 31,900 SF
- Laboratory Program
- Scientific Workplace Program



empowering imagination, pioneering discovery



Working to transform the treatment of conditions such as lupus, arthritis, sepsis, cancer, psychiatric illness, and Alzheimer's disease, scientists at the Feinstein Institutes for Medical Research strive to advance knowledge and make innovative therapies a reality. As the global headquarters for bioelectronic medicine, they are exploring ways to raise the standard of medical innovation using electronic medical devices to signal the body to heal itself.

Flad provided the master planning and programming through design of the phased renovation to modernize and improve 20,000 square feet of laboratories and support spaces. The project encouraged a better utilization of spaces through the introduction of flexibility into laboratories, better adjacencies between offices, and co-located collaboration spaces. The program includes a new cleanroom (Class 100), makerspace for prototyping for the development of medical devices, bioelectronics and biosensing lab, microfabrication lab, neural decoding and data analytics, rapid prototyping lab, mechanical engineering lab, neurophysiology, and other support spaces.

Programmatic Components

20,000 SF
Laboratory Program
Scientific Workplace Program
Office / Conference / Amenity



AdventHealth
(formerly Florida Hospital),
Translational Research Institute for
Metabolism and Diabetes ↻

bench-to-bedside research and discovery

Obesity, diabetes, and cardiovascular disease are three of the most significant health issues in the United States. Recognizing time is of the essence, researchers and medical professionals on the Florida Hospital campus are bringing medical discoveries from the laboratory immediately to the community through clinical trials.

With clinical services on the ground level, testing on the second level, and research at the third level, a unique relationship is developed in the application of bench-to-bedside research and discovery.

The Translational Research Institute for Metabolism & Diabetes (TRI) houses some of the most technologically advanced clinical

and diagnostic equipment in the country, including state-of-the-art calorimetry chambers, a biorepository, 3T MRI scanner, DEXA scanner, and testing rooms.

Programmatic Components

- 54,000 SF
- Laboratory Program
- Pharmacy
- High-tech Imaging
- Patient Rooms

Confidential Client,
New Research Center

flexibility for the future

Creating a new, signature laboratory at their existing campus, this international institute is expanding their available research facilities while also providing new shell space for future improvements. The new 33,000-square-foot, three-story addition offers a home for research into a range of rare diseases, from newly diagnosed ultra-rare genetic diseases that affect only a few people worldwide, to more commonly known conditions.

Designed with a phased approach to accommodate funding, the initial effort creates core and shell space with finished exterior and mechanical penthouse. The subsequent phase fits out two of the three floors of the shell space to provide wet labs, open and private office areas, specialized lab support areas, a variety of conference space, informal gathering spaces, break areas, and support space. The laboratory is purposely designed for the current needs of the researchers but includes inherent flexibility to accommodate future changes in research needs.

The new facility's design complements the existing campus, reflecting the surrounding natural landscape while creating an environment open to nature. The laboratory offers a state-of-the-art workplace and contemporary amenities to attract researchers to the campus.

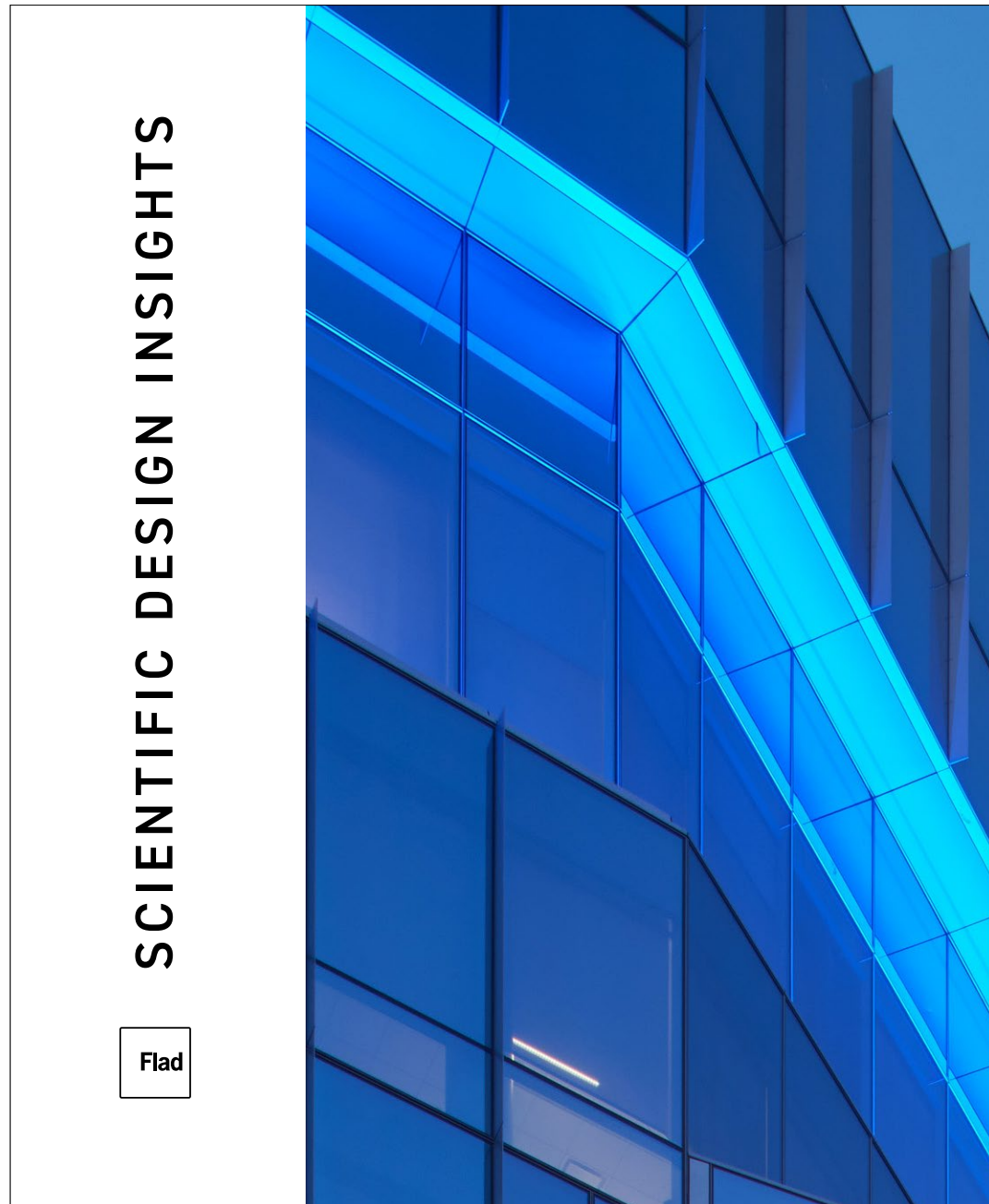
Programmatic Components

- 33,000 SF
- Laboratory Program
- Scientific Workplace Program

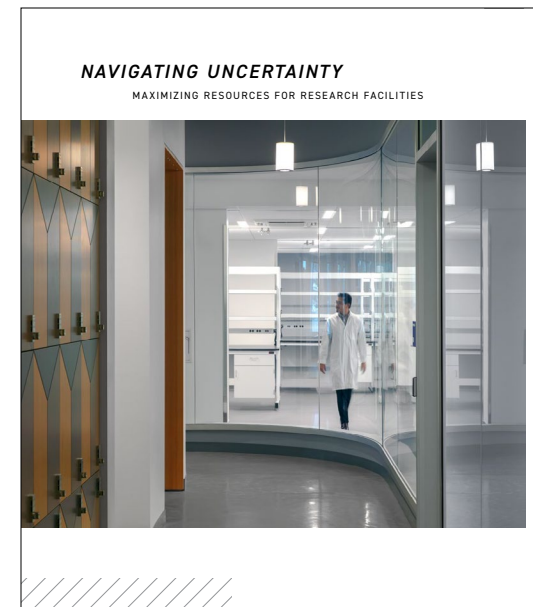




ADDITIONAL RESOURCES



- **Scientific Design Insights**
Expert advice, proven designs,
and stories to inspire



- **Navigating Uncertainty**
Maximizing Resources for Research Facilities
- **The Hypothesis**
Accelerating Clinical Therapy with GxP Facilities
- **The Hypothesis**
Designing Research Environments for Accessibility
and Automation while Addressing Increasing Costs
- **Ideas**
Finding New Value in Old Buildings
with Adaptive Reuse

CLIENT LIST

Abbott Laboratories	Howard T. Ricketts Regional Biocontainment Laboratory	Novartis
Adaptive Biotechnologies	Idaho National Laboratory	Northwell Health
Amgen	Illumina	Northwell Health Feinstein Institutes for Medical Research
Argonne National Laboratory	Influenza Research Institute	Oak Ridge National Laboratory
Battelle Memorial Institute	Johns Hopkins University	Pacific Northwest National Laboratory
Bayer	Juno Therapeutics, A Bristol Myers Squibb Company	Princeton Plasma Physics Laboratory
BioMed Realty	Lawrence Berkeley National Laboratory	Regeneron Pharmaceuticals, Inc.
Boyce Thompson Institute	Lawrence Livermore National Laboratory	Samsung Biologics
Brookhaven National Laboratory	Los Alamos National Laboratory	Sanford Burnham Preby Medical Discovery Institute
Centers for Disease Control and Prevention	Mayo Clinic	Seattle Children's Research Institute
Cleveland Clinic	Merck	Seagen
Connecticut Department of Public Health	MilliporeSigma	St. Jude Children's Research Hospital
Donald Danforth Plant Science Center	Moffitt Cancer Center	Syngenta
Exact Sciences	Monterey Bay Aquarium Research Institute	Takeda Pharmaceuticals
FibroGen	Mount Sinai Hospital	Texas Biomedical Research Institute
Fred Hutchinson Cancer Center	National Institute of Environmental Health Sciences	The Jackson Laboratory
Fujifilm Cellular Dynamics	National Institutes of Health	Tufts University Regional Biocontainment Laboratory
Genentech	National Renewable Energy Laboratory	UCLA Institute of Immunology
GlaxoSmithKline	Nektar Therapeutics	University of California, Berkeley
Healthpeak Properties		Wisconsin State Lab of Hygiene

**research institute clients shown in bold*



Flad Architects is a national planning and design firm committed to creating environments that enhance human potential. In partnership with leading research organizations, universities, healthcare institutions, and science-based companies, Flad designs innovative facilities that enable revolutionary discoveries that have a profound impact on society.

Over 95 years of passionate and rigorous focus on buildings devoted to the sciences has earned Flad consistently high rankings among the top 20 architectural firms, both overall and in the specific areas of science & technology, academic, and healthcare design.

Flad.com

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