



February 11, 2009

Purchasing Division
2019 Washington Street, East
P.O. Box 50130
Charleston, WV 25305-0130

Subject: EXPRESSION OF INTEREST
RFQ Number LBS90030
Laboratory Services Facility Improvement Projects

Dear Selection Committee:

We invite you to discover the comprehensive technical experience of HDR Architecture, Inc (HDR) and the design excellence of CUH2A. This new merger of HDR and CUH2A creates the world's most comprehensive science and technology firm that encompass the breadth, depth and design expertise of an integrated HDR CUH2A team for every aspect of public health facilities design. We feel confident this team can and will deliver unprecedented results for the West Virginia Department of Health & Human Resources, Bureau for Public Health, Office of Laboratory Services, based on our past experience. We have assisted over 40% of the nations state public health laboratories achieve their mission

National Expertise combined with Local Presence best defines the team we have assembled for this project. HDR CUH2A is associated with Alpha Associates of Morgantown and Martinsburg to assure that we provide cost effective services with the depth of public health experience. HDR CUH2A will take the lead for the planning effort with the West Virginia Office of Laboratory Services (OLS) leadership to create a program and a prioritized list of implementation projects based on laboratorian safety, code compliance, and available funding. Alpha Associates will lead the documentation and construction administration phases of the project. This simple approach delivers cost effective National Expertise combined with Local Presence.

Our professional accomplishments in the planning and design of flexible public health laboratories anticipate future changes in mission by incorporating an interdisciplinary design process. HDR CUH2A design solutions integrate predictable building systems patterning to facilitate efficient use of systems redundancy and improve operations and maintenance. We understand the changing Federal mandates for energy efficiency and promote optimized system performance for results driven solutions. Your challenge is clear and your opportunities are endless:

- Science Gazing – HDR CUH2A lab planners understand public health laboratories assisting 24 states with their public health mission and can facilitate a futurist's view from today's reality
- Connection to the Grid – HDR CUH2A creates linkages to public utilities that provide a flexible and dependable campus utility and infrastructure to accommodate future science
- Sustainable Solutions – HDR CUH2A can assist OLS to create a sustainable campus as your community legacy. Comprehensive forward looking institutions should be stewards of the environment

We stand ready to present to you in person and share the secrets of our success to delivering high quality services to our clients. Thank you in advance for your interest and consideration of the HDR CUH2A team. In the meantime, if you have any questions, please contact me at 773.380.7924 (Direct), 847.778.6824 (Cell), 773.380.7979 (Fax), or warren.hendrickson@hdrinc.com.

Sincerely,

A handwritten signature in black ink that reads 'Warren Hendrickson'.

Warren Hendrickson, AIA, LEED AP
Principal, Planner

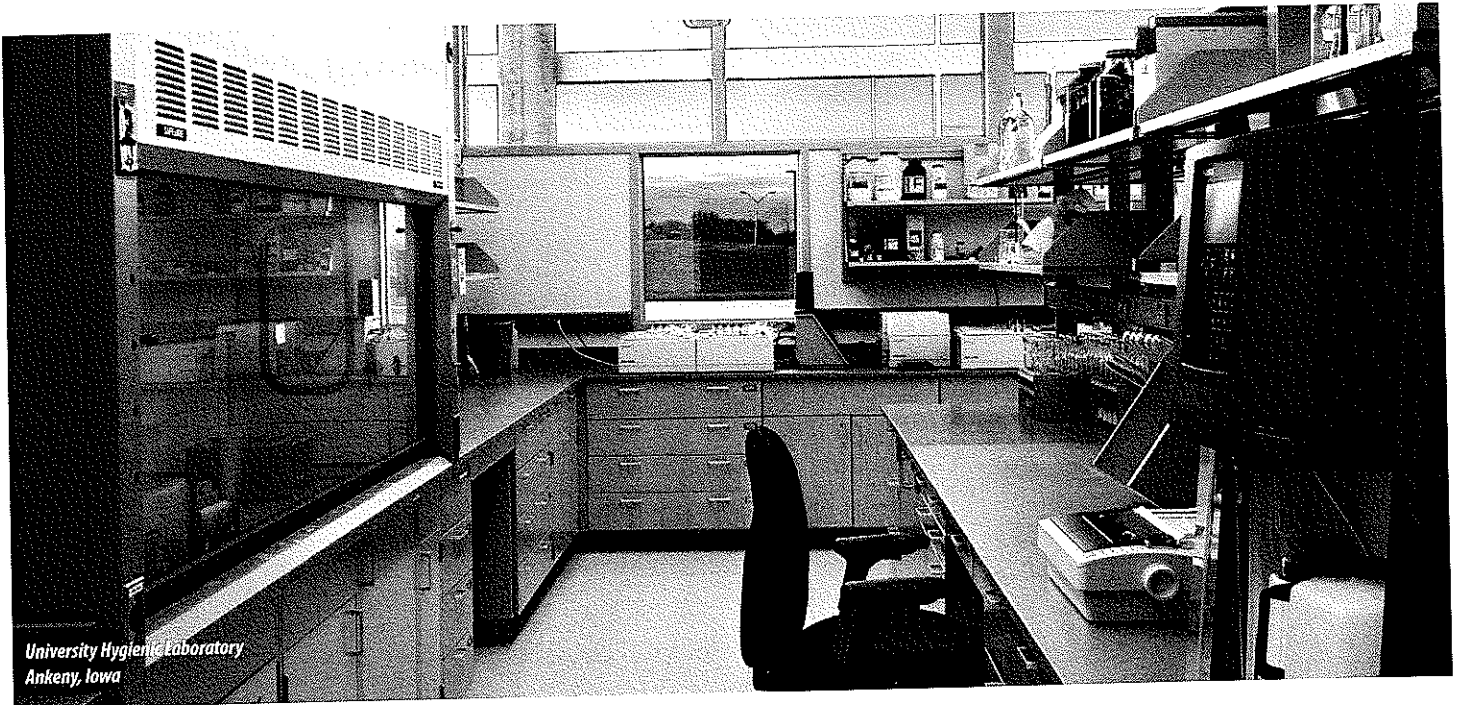
GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
15. **WEST VIRGINIA ALCOHOL & DRUG-FREE WORKPLACE ACT:** If this Contract constitutes a public improvement construction contract as set forth in Article 1D, Chapter 21 of the West Virginia Code ("The West Virginia Alcohol and Drug-Free Workplace Act"), then the following language shall hereby become part of this Contract: "The contractor and its subcontractors shall implement and maintain a written drug-free workplace policy in compliance with the West Virginia Alcohol and Drug-Free Workplace Act, as set forth in Article 1D, Chapter 21 of the West Virginia Code. The contractor and its subcontractors shall provide a sworn statement in writing, under the penalties of perjury, that they maintain a valid drug-free work place policy in compliance with the West Virginia and Drug-Free Workplace Act. It is understood and agreed that this Contract shall be cancelled by the awarding authority if the Contractor: 1) Fails to implement its drug-free workplace policy; 2) Fails to provide information regarding implementation of the contractor's drug-free workplace policy at the request of the public authority; or 3) Provides to the public authority false information regarding the contractor's drug-free workplace policy."

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in case of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130

Table of Contents



Cover Letter

Table of Contents

TAB 1 - EXPERIENCE

Company Overview
Project Experience
Design Awards

TAB 2 - STAFF & RESOURCES

Key Staff Resumes
Firm Resources

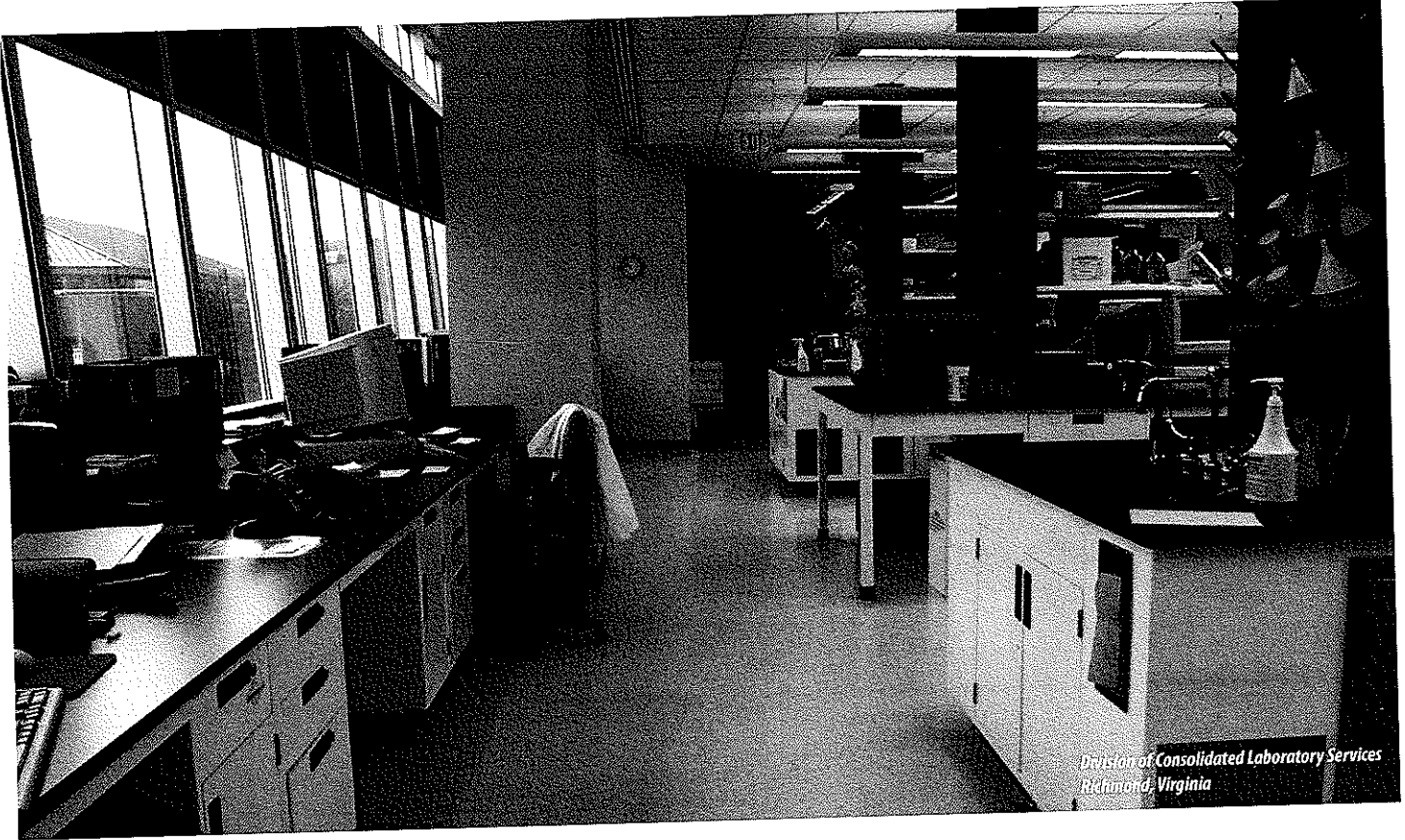
TAB 3 - CONSTRUCTION MANAGEMENT

Construction Management Plan
Schedule Management

TAB 4- PURCHASING AFFIDAVIT

TAB 5- ADDENDUM NO. 1 ACKNOWLEDGEMENT

Experience



Company Overview - A Focus on Public Health

HDR CUH2A is the most comprehensive Science + Technology design firm in the world. HDR CUH2A assembles the deepest pool of design expertise across the entire spectrum of the rapidly converging fields of public health, and molecular science. HDR CUH2A approaches each project with an enthusiasm and drive to learn as much as we can about our clients' program and facilities challenges, needs and opportunities. With more than 1,700 Professionals across 40-plus offices in the United States, HDR CUH2A brings national expertise with this facility type.

The HDR CUH2A team offers:

- National Firm Depth of Experience
- Local partner Alpha Associates, Inc. has demonstrated experience
- Extensive Public Health facility design experience, including BSL-3 containment labs
- Collaborative design philosophy and experience

We have come together to form a team with individuals committed to collaboration in an integrated design process, which we believe creates a unique synergy to attack this project quickly and efficiently.

With complementary portfolios across the government, industrial, academic, and corporate S+T market sectors, HDR CUH2A delivers integrated design services for an extensive array of specialty areas including Public Health and bio-containment. We have significant and recent experience in Public Health Laboratory facilities. HDR CUH2A is the only diamond level member architectural firm of the Association of Public Health Laboratories (APHL), and our Public Health Laboratory Specialists are also members of the American Biological Safety Association.

HDR CUH2A proposes herein an Architecture and Engineering Design Team of carefully selected HDR CUH2A team members and a local partner firm in response to the West Virginia Department of Health and Human Services, Bureau for Public Health, Office of Laboratory Services Facility Improvement Projects.

Experience

HDR CUH2A Mission

"Our mission is to be the preferred provider of a full range of superior professional architectural, engineering and consulting services and expertise to public and private clients"

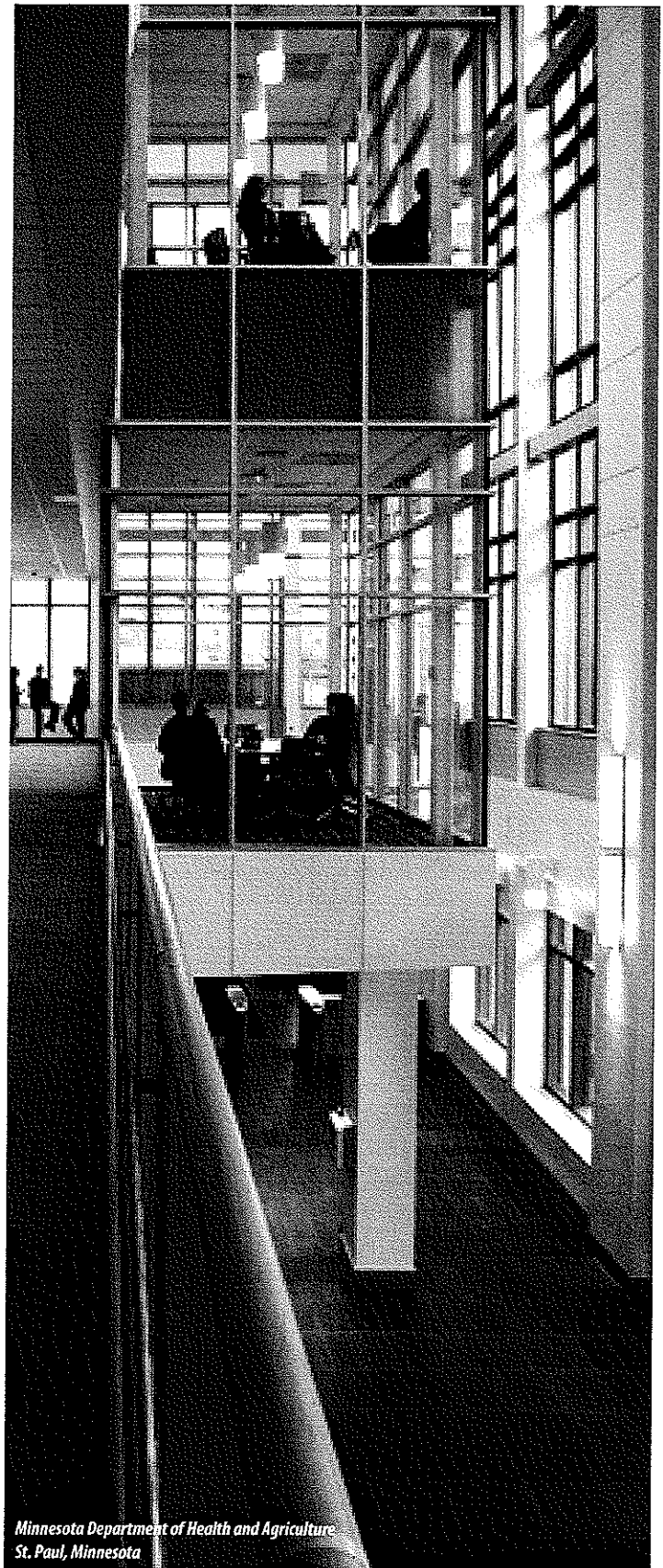
Values

- *RESPECT* - Value and respect our clients, employees, and partners
- *INTEGRITY* - Consistently do the right things for the right reasons
- *CONTINUOUS IMPROVEMENT* - Strive to continuously improve what we do
- *EMPOWERMENT* - Enable employees to take action
- *OPEN COMMUNICATION* - Effectively exchange ideas and information
- *INNOVATION* - Think and respond outside traditional boundaries
- *TEAMWORK* - Put forth cooperative effort to achieve common goals
- *EMPLOYEE DEVELOPMENT* - Create opportunities for individuals to achieve their potential
- *RESPONSIBILITY* - Accept ownership for results.

Furthering the Public Health Mission

Following is a list of states we have worked with to meet the growing demand for public health laboratory improvements in their state:

- Arizona
- California
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Maryland
- Minnesota
- New Mexico
- New Jersey
- New York
- North Carolina
- North Dakota
- Oklahoma
- Oregon
- Utah
- Vermont
- Virginia
- Washington
- Wisconsin
- Wyoming



Minnesota Department of Health and Agriculture
St. Paul, Minnesota

Experience



Arizona Bureau of Laboratory Services
Phoenix, Arizona

Assisting our Public Health Services clients to evolve into more efficient, higher quality public health providers is one of the major goals of HDR CUH2A. In addition to our architects and other designers, HDR CUH2A professionals are prepared to help Public Health Services clients with outcome based operational planning. HDR CUH2A experienced professionals analyze the way public health facilities deliver services, helping clients achieve the best combination of cost and quality.

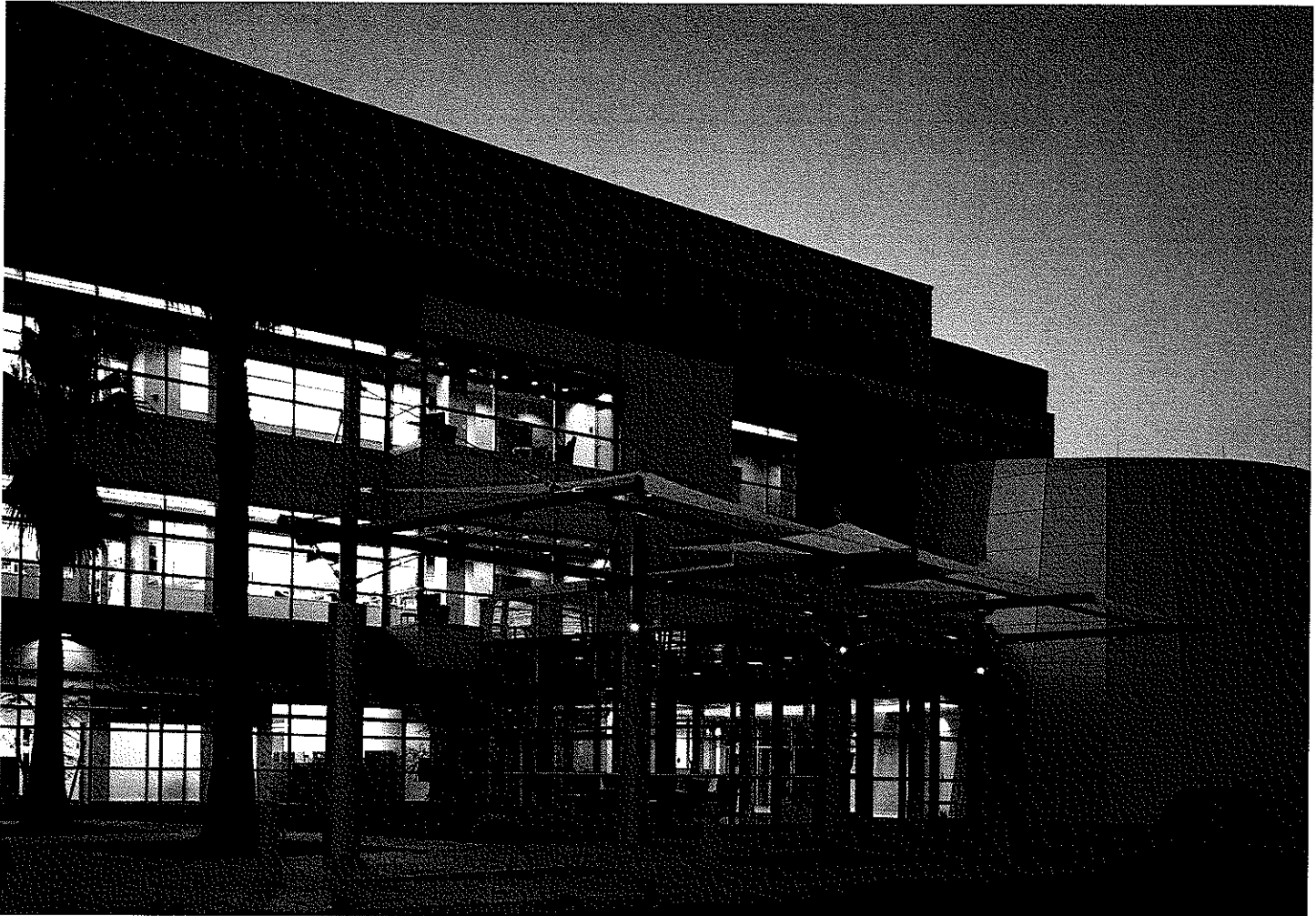
Understanding what is necessary to achieve the ideal public health services delivery model is key to successful outcomes. By examining a particular client's situation from multiple angles, HDR CUH2A is able to create unique solutions to specifically match client needs.

An important aspect of planning for the future is identifying short and long term process improvement opportunities. The essence of HDR CUH2A's planning approach is developing a thorough understanding of the "current state of operations," developing the "ideal public health facility processes" and then focusing on the gap between these two states. We pride ourselves on identifying quantifiable short and long-term opportunities for process improvement that translate into cost, quality and service impacts.

HDR CUH2A is one of the largest architecture and engineering design firms in the United States, we maintain sufficient staff to deliver the highest quality service to our clients. All of the team members listed in this proposal are committed to this project for its duration. Their selection to serve on your team was based on their relevant experience and on their availability to commit the necessary time and effort to perform responsibilities in a timely, efficient manner.

Experience

Arizona Department of Public Health State Laboratory Phoenix, Arizona



This new design/build facility enhances the State's ability to protect the health of all Arizonians by providing a wide range of research and testing. As the State's high through-put laboratory, the facility handles a huge quantity of specimens requiring minimal testing for monitoring the environment. Concurrent with this testing, the laboratory serves an epidemiological function of identifying health trends and areas of infection. The facility also functions

as a reference laboratory for State agencies and will serve on the frontline in the war against biological and chemical terrorism. In this new role, the facility will handle specimens of unknown origin, requiring innovative design responses to address security and accessioning.

Project Details

Cost: \$22,000,000

Size: 73,000 SF (6,780 m²)

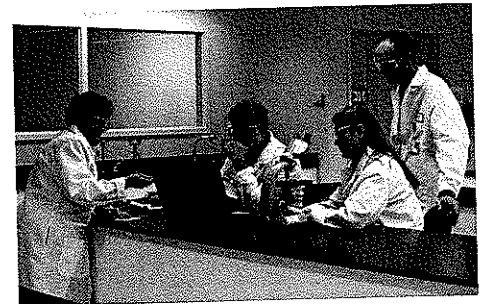
Responsibility: Full A/E /P Services

Building Components: Biomedical Research Laboratories, Training Laboratories, High Containment (BSL-2 and -3), Office and Interaction Spaces, Cafe and Multipurpose Room

Experience

Division of Consolidated Laboratory Services New Laboratory

Richmond, Virginia



HDR CUH2A, together with Richmond based McKinney & Company, recently completed a new laboratory for the Division of Consolidated Laboratory Services (DCLS) in downtown Richmond, Virginia. DCLS is the Commonwealth of Virginia's state public health laboratory and will provide science research and testing to support various governmental entities. Due to the huge quantity of sample specimens that will

be handled here—2.5 million samples per year—special efforts address security and accessioning. The laboratories are designed using a repetitive model to accommodate the ever-changing scientific research requirements.

Project Details

Cost: Confidential

Size: 191,000 SF (17,744 m²)

Responsibility: Laboratory Planning and Design, MEP Conceptual Engineering and Engineering Peer Review for Laboratory Spaces

Building Components: High Containment (BSL-2 -3 and -4). Office and Interaction Spaces. Biological and Chemical Testing

Experience

Minnesota Departments of Health & Agriculture Public Health Facility St. Paul Minnesota



This new public health facility collocates the Minnesota Departments of Health & Agriculture laboratories and offices. The new building provides state-of-the-art public health, agricultural testing, and assessment laboratories designed to meet the current and future needs of the State of Minnesota. The facility houses BSL-2, BSL-3, BSL-3Ag laboratories as well as Environmental Radiation & Environmental Metals Laboratories. HDR CUH2A collaborated with HGA on this project.

Project Details

Cost: \$60,000,000

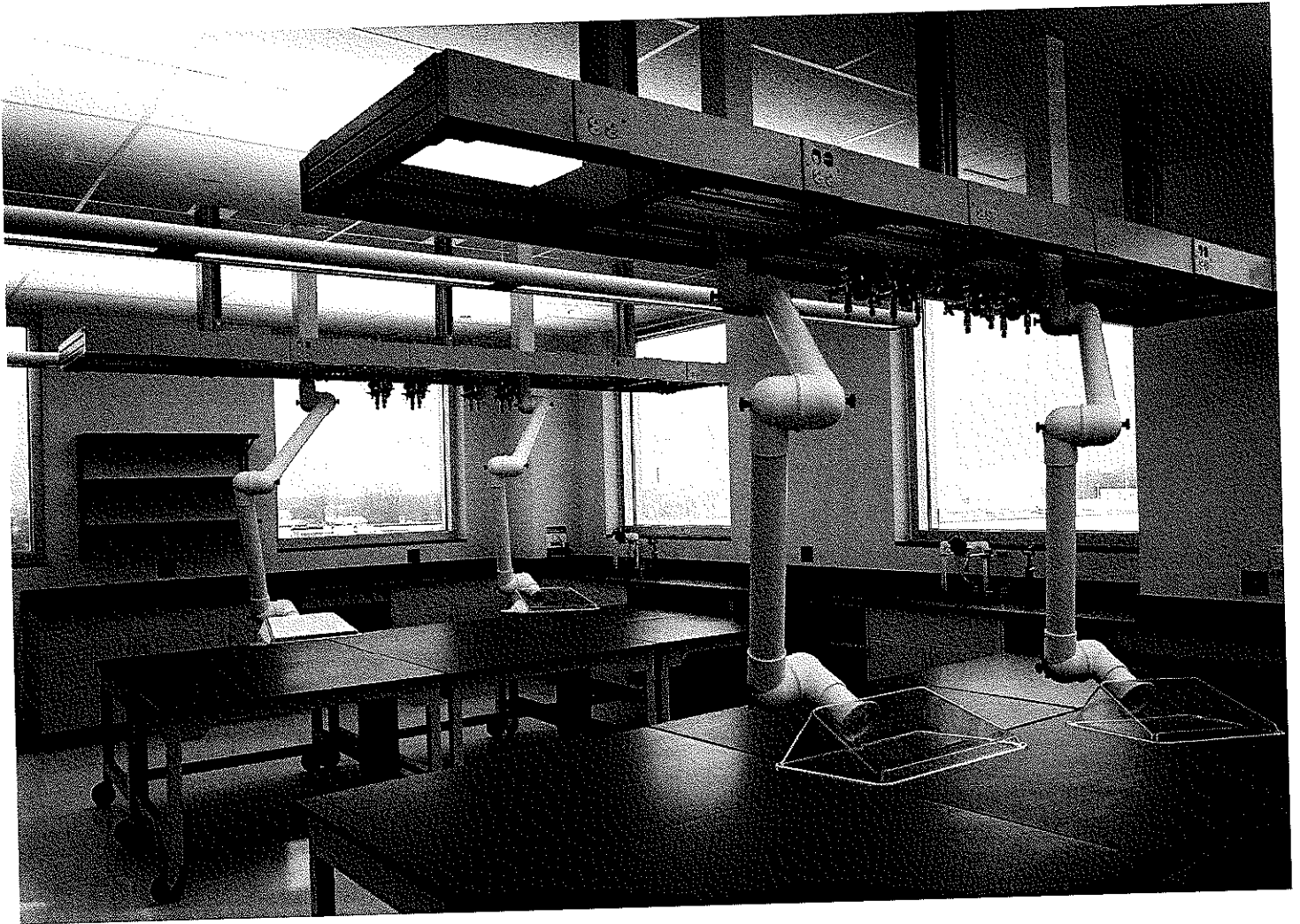
Size: 177,940 SF (16,512 m²)

Responsibility: Laboratory Planning, MEP Engineering Peer Review for Laboratory Spaces and Basic Commissioning

Building Components: State-of-the-Art BSL-2 BSL-3, BSL-3Ag, BLS-4 Glovebox Bioterrorism Chemical Terrorism, Environmental Radiation and Environmental Trace Metal Laboratories Agricultural Testing Central Accessioning Training Labs and Animal Facilities

Experience

State of Indiana Forensic and Health Sciences Laboratories Indianapolis, Indiana



The new laboratory project is a collocation of three of the State's first responders in the battle against crime, terrorism, public health, and emerging disease response. The building will house the primary laboratory facilities for the Indiana State Police, the Indiana State Department of Health and the Department of Toxicology. HDR CUH2A is responsible for the programming and design of the ISDH and the Department of Toxicology spaces in addition to the Central Accessioning and loading dock support spaces. HDR CUH2A is collaborating with Ratio Architects on this project.

Project Details

Cost: Confidential

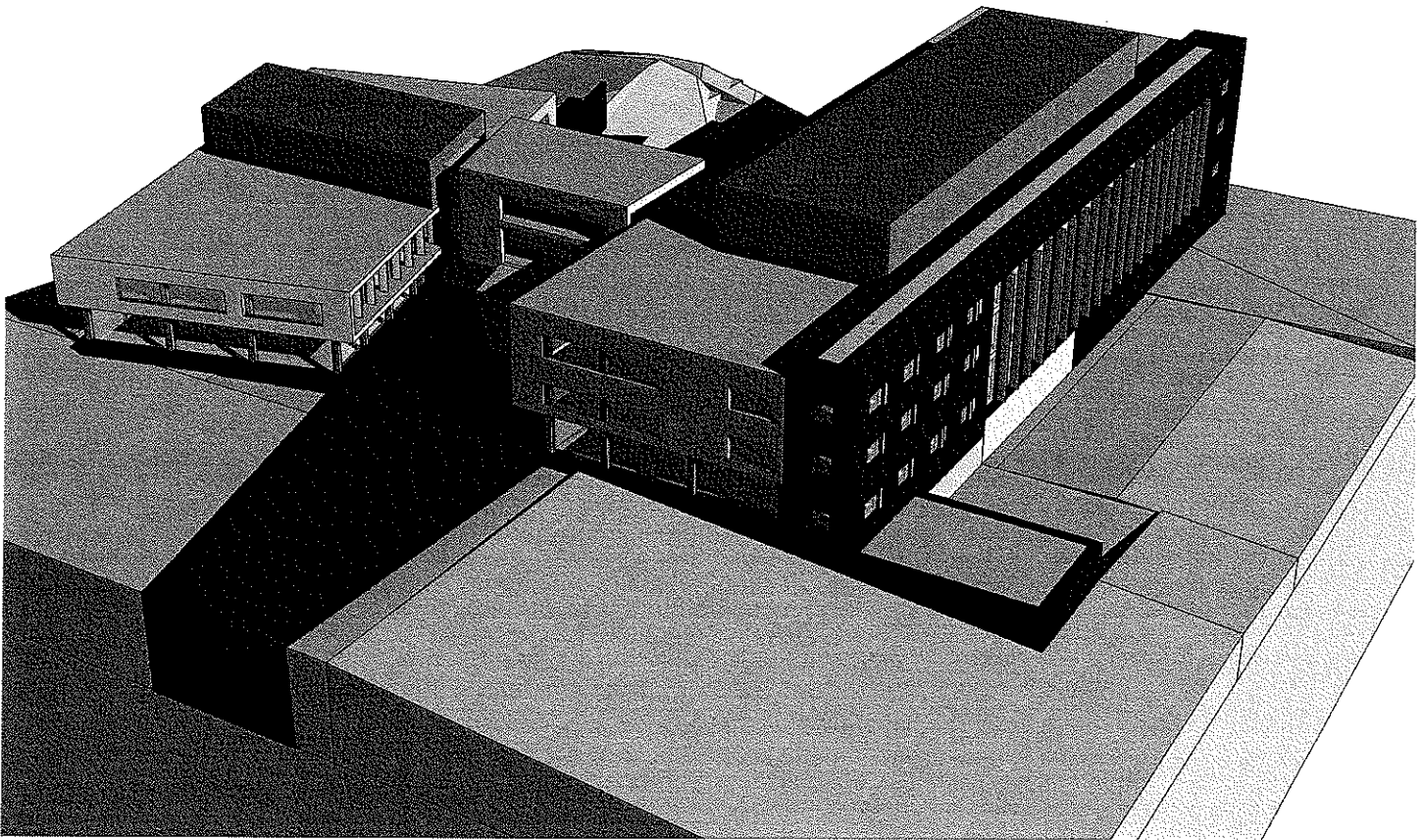
Square Footage: 75 000 SF (6,968m²)

Responsibility: Laboratory Planning and Design, MEP Conceptual Design and MEP Peer Review

Building Components: State-of-the-Art Laboratories, Office Space, High Containment (BSL-3)

Experience

State of North Carolina New State Health Sciences Laboratory Raleigh, North Carolina



The new state-of-the-art Public Health Laboratory for the State of North Carolina will co-locate the State Laboratory of Public Health and the Medical Examiners office. The goal is to relocate both branches into a new facility, finding opportunities for shared spaces while maintaining separate identities for each group. This flexible facility will provide a safe work environment by enhancing building security to meet select agent use, and will be designed to promote interaction between the different groups. HDR CUH2A is collaborating with O'Brien Atkins on this project.

Project Details

Cost: \$82,000,000

Size: 204,000 SF (18,952 m²)

Responsibility: Laboratory Planning and Design, MEP Engineering Programming

Building Components: BSL-3 Suite, Central Accessioning and Data Entry Pool, Virology Testing, Environmental Analytical Laboratory Services and Newborn Screening

Experience

US Centers for Disease Control and Prevention Emerging Infectious Diseases Laboratory

Atlanta, Georgia



CDC's newest containment facility, the largest in the world dedicated to human health, is open and bright, extremely flexible and contains the highest-level bio-safety laboratories. In CDC's own words, it is "the most advanced laboratory facility in the world"

The new facility includes BSL-4 laboratories capable of handling life-threatening and exotic pathogens for which there are no treatments or vaccines. The facility is the first to provide multiple combinations of BSL-3 and BSL-4 modules and shared specimen support space; providing expanded mission critical space and greatly improved working conditions. The recipient of R&D Magazine's Lab of the Year Special Mention award, this facility was recognized for establishing "new criteria and standards of excellence for BSL-4. Nothing like this has ever been done before."

Project Details

Cost: \$163,000,000

Size: 423,000 SF (39,300 m²)

Responsibility: Full A/E/P Services

Building Components: Infectious Disease Research Laboratories, High Containment (BSL-2 -3 -3ag. and -4; ABSL-3 and -4) Vivaria, Imaging, and Administrative Offices

Experience

Relevant Renovation Experience

CUH2A's renovation and alterations client list includes all of the major private corporate biotech and pharmaceutical companies to major academic institutions, as well as all of the significant U.S. state and federal research agencies, including the following:

Bristol-Myers Squibb
Hoechst Marion Roussel
Pfizer, Inc
Merck & Co., Inc.
Mobil Chemical, Inc
Roche
Amgen

Columbia University
New York University (NYU)
Rutgers University
Haverford College
University of Medicine and Dentistry of NJ
University of Chicago
Georgia State University

National Institutes of Health – NIH
U.S. Food & Drug Administration – FDA
U.S. Department of Agriculture – USDA
NJ Economic Development Authority – NJEDA
NY State Department of Health
U.S. Department of Energy

The following are examples of recent relevant renovation, alteration and addition projects that show the broad spectrum of experience and depth of our staff in the evaluation and design of these types of projects:

State of Vermont Department of Public Safety
Forensic Laboratory
Essex Junction, VT
29,241 sf laboratory renovation

Columbia University
Schermerhorn Hall Laboratory Renovation
New York City, NY
2,000 sf Laboratory and animal renovation – 4th floor
BSL-2 level

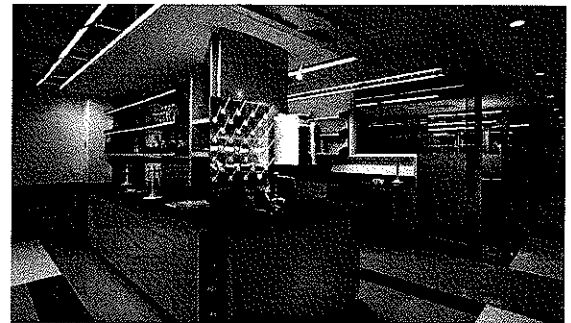
Pfizer, Inc
Cambridge Technology Center Renovation
Cambridge, MA
100,000 sf Laboratory renovation – multiple floors

National Institutes of Health - (NIAID)
Twinbrook Research Center
Rockville, MD
75,000 sf Laboratory and vivarium alteration – multiple floors
BSL-2, BSL-3 and ABSL-3

University of Medicine & Dentistry of NJ
Regional Biocontainment Lab Addition
Newark, NJ
40,000 sf Laboratory and animal facility addition – 3 floors
BSL-2, BSL-3e, ABSL-2 and ABSL-3e

New York University
Physics Soft Condensed Matter Laboratory
New York, NY
4,500 sf laser lab renovation

University of Florida
Communicore BSL-3 Animal Facility Renovation
Gainesville, FL
55,333 sf laboratory addition and renovation
BSL-3, and ABSL-3



Schermerhorn Hall Laboratory Renovation

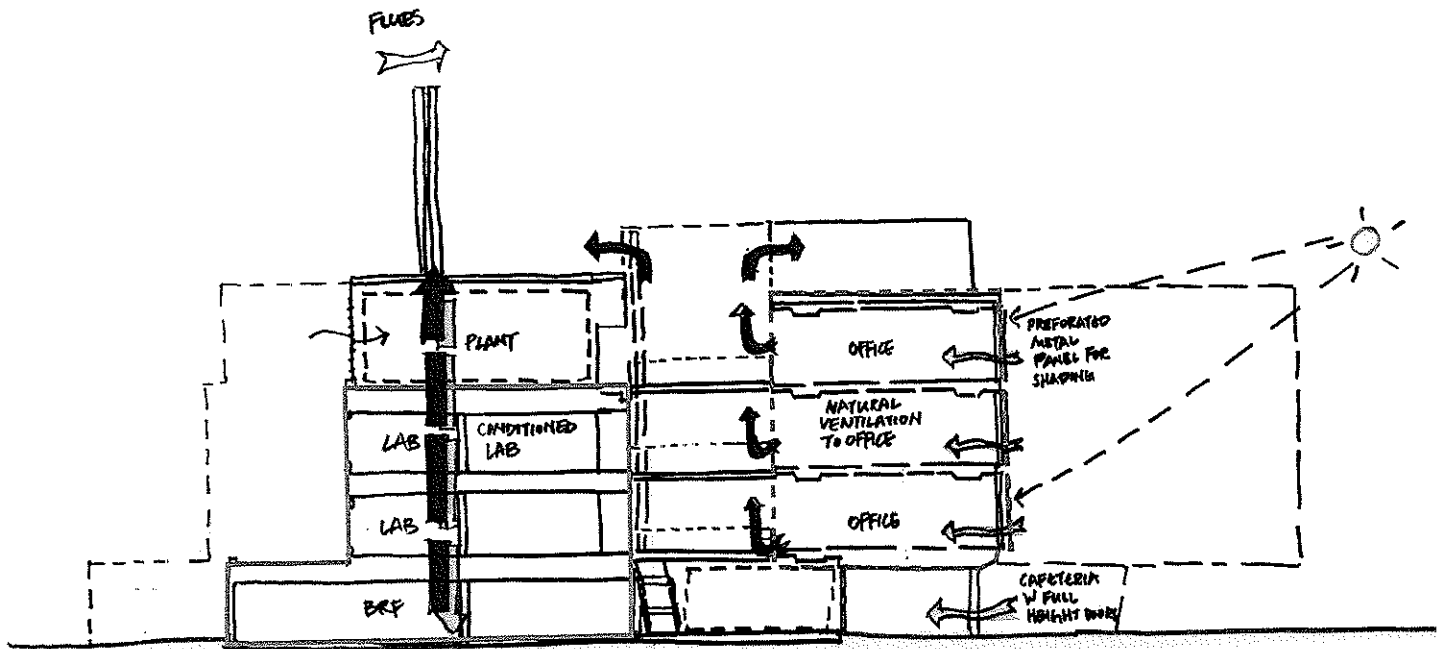


Physics Soft Condensed Matter Laboratory



Twinbrook Research Center

Experience



Energy Consumption

With the increased energy demands associated with complex science and technology facilities, HDR CUH2A has an even greater responsibility to protect our environment through sustainable design. HDR CUH2A has accepted the Architecture 2030 Challenge to reduce energy consumption to carbon neutral by the year 2030. Our integrated and holistic approach to design has long included "green" goals. We minimize site disturbance, maximize naturally-lighted interior space, create energy-efficient building envelopes, and use non-toxic, environmentally appropriate building materials to create healthy work environments. With over 400 LEED Accredited Professionals on staff, HDR CUH2A has successfully implemented the LEED Green Building Rating System® and BREEAM environment assessments on numerous projects worldwide.

The successful implementation of Green Building strategies and technology requires a well-integrated design team, including sustainability-trained architects, engineers, laboratory planners, landscape architects, light designers, interior designers, and cost estimators ... a typical HDR CUH2A team. Since projects which commit to Green Building strategies early can benefit the most, our conservancy strategy for each project starts at the programming and schematic design phases with an evaluation of the potential for minimizing environmental impacts and improving energy efficiency.

All HDR CUH2A project design teams establish goals and strategies for energy conservation and environmental performance for all projects. Each Project Team setting project sustainability goals and performance targets, undertakes a LEED®-based charrette with the client and all core team members, and maintains project goals through monthly status checks.

All HDR CUH2A projects are reviewed for compliance with LEED® Silver equivalent standards. We recognize Silver-level performance, now adopted by many agencies, institutions and businesses as generally achievable within a conventional cost model. Each Studio confirms performance through the Quality Management Process.

All HDR CUH2A buildings will achieve energy cost savings 30% below current baseline- within the established project budget. While LEED® provides a good framework for analysis, we recognize a primary obligation is to conserve energy and reduce operating costs. Energy modeling supports the integrated design process and provides the information needed to assess total cost of ownership.

A selection of our projects that demonstrate reduced energy consumption as well as reduced cost of ownership follows:

The **Northwestern University 'Green Chemistry Lab'** was designed to address environmental and cost sustainability issues. In addition to a broad use of sustainable materials and finishes, the building services were designed to have 'occupied/unoccupied' operating modes to economize on fume cupboard ventilation and lighting controls for direct energy conservation. The savings in cooling/heating load alone are budgeted at up to \$450,000 per annum.

Experience

Cornell University, Animal Health Diagnostic Center in Ithaca, New York, is the only full-service multidisciplinary animal diagnostic facility serving the Northeastern United States. The building has been designed to operate on 50% less energy than similar buildings of this type. Special attention has been given to building orientation, exterior wall construction detailing and glazing selection, heat recovery, reduced air change rates and other strategies to provide an energy conscience and appropriate building, designed to meet LEED Silver certification standards

Cornell's campus also utilises a lake source cooling system which uses the cool water of Lake Cayuga to produce 47 degree chilled water. By eliminating the need for chillers, the university produces chilled water for the cost of the electricity required to run the pumps alone. The system is equivalent to a conventional chiller system operating at 0.1kW/ton.

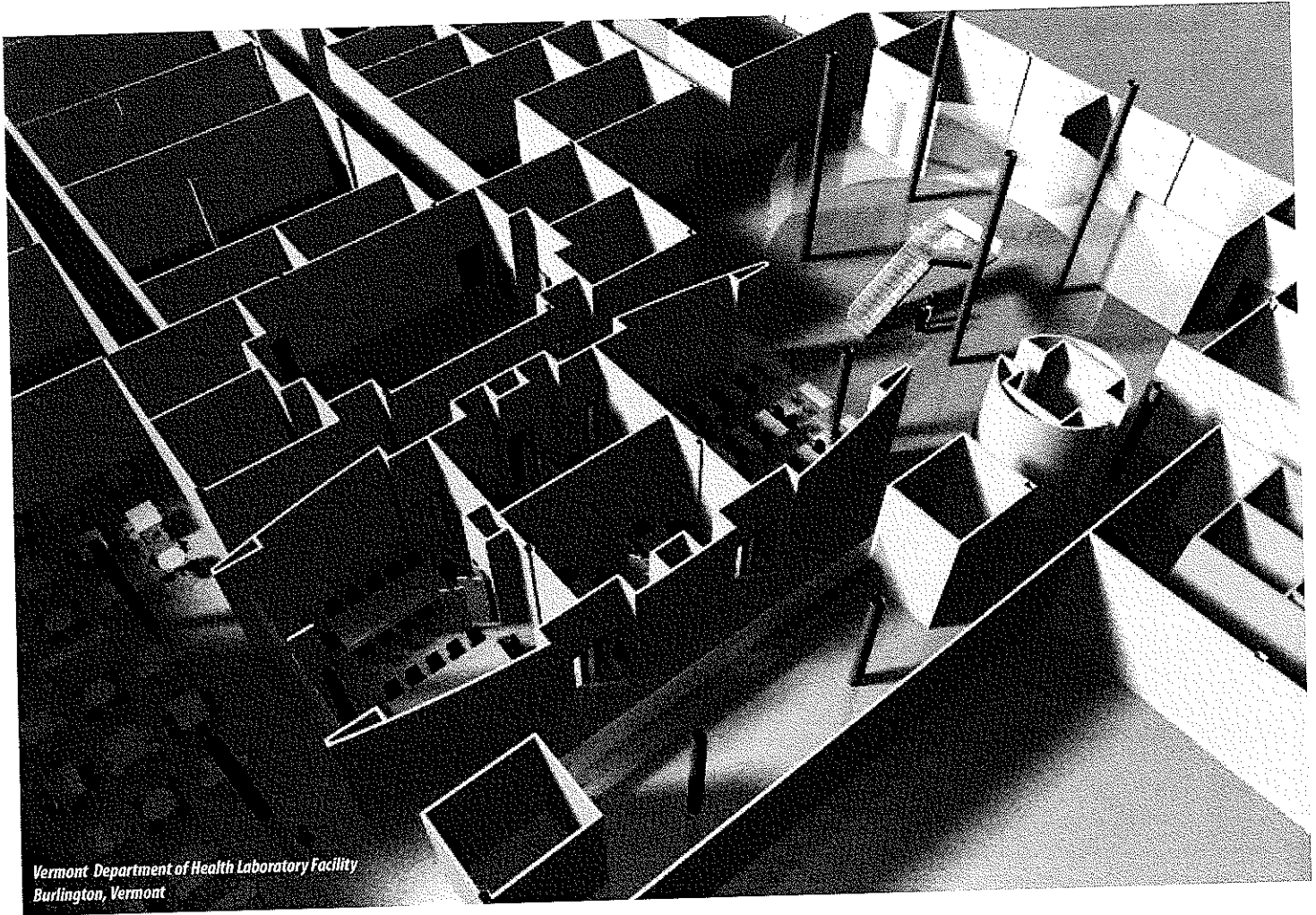
With the use of lake source cooling, the campus combined heat and power system, variable volume air handling systems, and a run-around heat recovery system, the Animal Health Diagnostic Centre will achieve an energy savings of 33% compared to an ASHRAE 90.1 Baseline model.

Haverford College challenged HDR CUH2A to make their **Integrated Natural Science Facility** as energy efficient as possible. To answer this challenge the facility design included the unique mechanical system that conditions the facility's makeup air separately from the air that maintains thermal comfort. Energy wheels precondition the makeup air to space-neutral conditions (the temperature and relative humidity levels desired for comfort within the building). Individual fan-coil units located within each space or building zone further condition a portion of this makeup air to maintain desired thermal conditions in each space. There is no need for reheat because the air entering the fan-coil units is at space-neutral conditions. Because the conditioned makeup air is distributed through a network of plenums, there is very little ductwork in the building. Designers estimated that the KINSC system saves 52% in cooling and heating energy annually for the entire facility as compared to a system using 100% outside air, variable air volume (VAV) fume hoods, and no energy recovery. When compared to a similar conventional laboratory system that incorporates sensible energy recovery, the comparable thermal energy savings are still 45%.



*Green Chemistry Laboratory
Northwestern University, Evanston, Illinois*

Experience



Construction Design

Express integrated design

Rigorous attention to an internal organization that supports a particular work culture results in architecture that is coherent and intelligent. Our approach synthesizes creative imagination and rational logic to integrate the functional, contextual, social, environmental and cultural aspects of a project into a unified and clear expression of an organization's mission

Rethink the standard approach

Architectural form that interprets its very purpose creates value through ideas specific to that project. We implement our skills and knowledge in design, architecture and urban design to uncover innovation and richness that extends beyond economic and functional criteria.

Capture a bold idea or concept

Design is an evolutionary process, and our aim is to capture the essence of a particularly forward-looking component along that continuum. Our architecture creates a sense of place that expresses the work endeavor from the inside out

Embody the client's vision

Our designs strive to embody the overarching vision of an organization, while maintaining a commitment to the primacy of public space, the glue that holds the physical fabric of a community together. Through the form and articulation of the architecture itself, our designs enhance and express the beauty inherent in the balance between the rational and the intuitive; between function and delight

The following projects represent relevant experience of our capabilities for the engineering and design of the Laboratory Services Facility Improvement Projects.

Experience

HDR CUH2A Design Awards

As is the critical nature of our profession, we have graciously accepted numerous awards for our contributions to the design vernacular over our long history. These awards convey a great range of recognition from local communities to the regional and national acclaim of the American Institute of Architects. The following is a collection of some of our citations

- 2007 National Institutes of Health The C.W. Bill Young Center for Biodefense and Emerging Infectious Diseases
NIH Director's Award NIH Director's Award

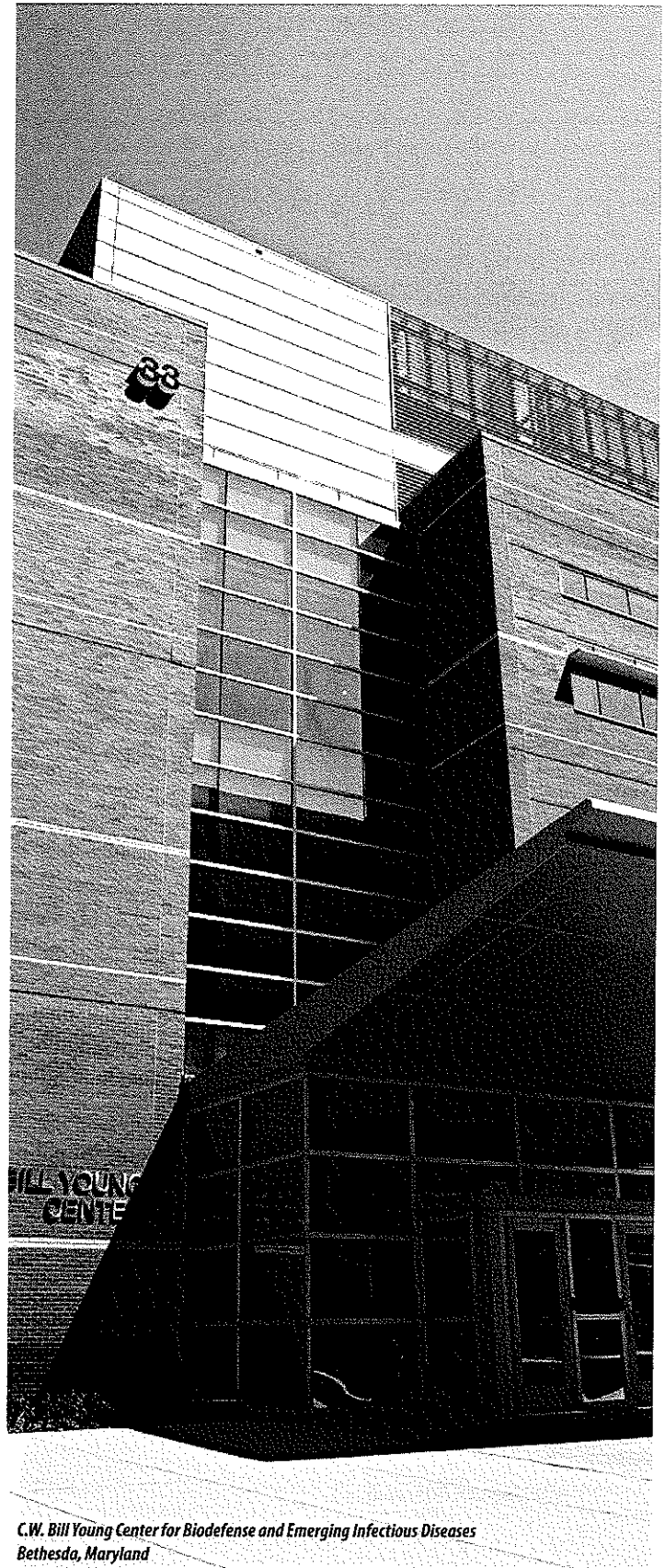
- 2007 National Security Sciences Building (NSSB)
Los Alamos National Laboratory
Los Alamos, New Mexico
Design-Build Excellence Award
"Public Buildings \$15 Million and Over" Category
Design-Build Institute of America

Secretary's Award of Achievement
U.S. Department of Energy

- 2007 McKinney Green Building
McKinney, Texas
Pyramid Award, Specialty Construction Category
Associated Builders and Contractors – Excellence in Construction (ABC EIC) Awards Program

Project of the Year - Texas Renewable Energy Industries Association

LEED Core and Shell Platinum Rating
U.S. Green Building Council



*C.W. Bill Young Center for Biodefense and Emerging Infectious Diseases
Bethesda, Maryland*

Experience



*Birck Nanotechnology Center
Purdue University, West Lafayette, Indiana*

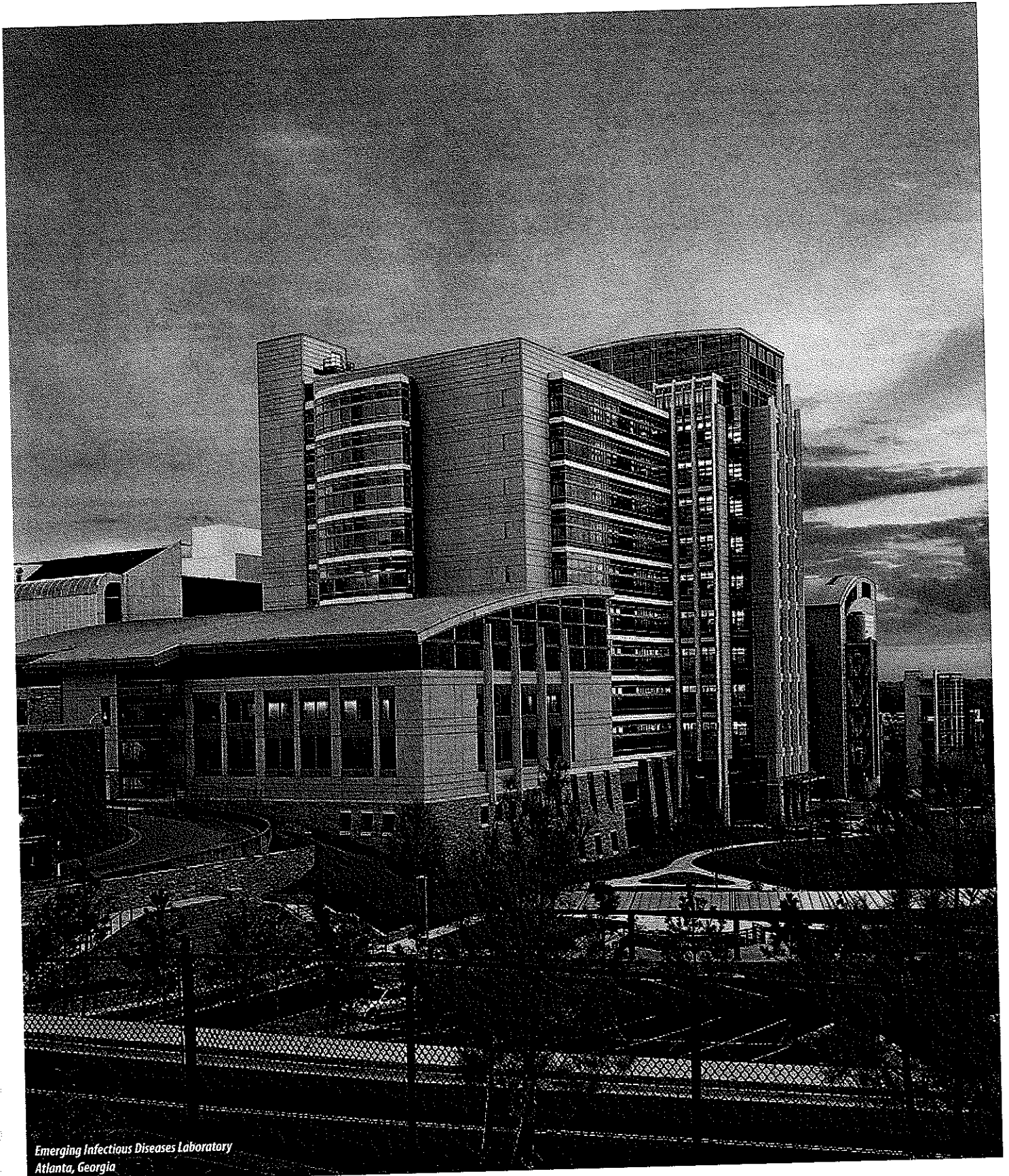
- | | |
|--|--|
| <p>2007 Banner Bank Building
Boise, Idaho
BD+C Building Team Awards, Special Mention
Building Design & Construction Magazine</p> | <p>2006 Purdue University Birck Nanotechnology Center
West Lafayette, Indiana
Selected for Publication in November 2006 Issue of
AS&U Architectural Portfolio Magazine</p> |
| <p>2007 USAMRIID, National Interagency Biodefense Campus
AIA NJ, Merit; Unbuilt</p> | <p>2006 Banner Bank Building
Boise, Idaho
LEED Core & Shell Platinum Rating
U.S. Green Building Council
Smart Growth President's Award</p> |
| <p>2007 Cornell University, Animal Health Diagnostic Center
AIA NJ, Merit; Unbuilt</p> | <p>2006 National Institutes of Health, Biomedical Building 33
AIA Potomac Valley, MD, Design Citation Award</p> |
| <p>2007 Air Liquide, Delaware Research & Technology Center
Merit; Unbuilt</p> | <p>2005 National Institutes of Standards & Technology
Advanced Measurement Laboratory
Gaithersburg, Maryland
R&D Magazine's
Lab of the Year High Honors Award</p> |
| <p>2006 Department of Energy Pacific Northwest National Labs
AIA NJ, Design and Sustainability Merit Award</p> | |
| <p>2006 Dubai Biotechnology & Research Park
Headquarters Complex
AIA NJ, Design and Sustainability Honor Award</p> | |

Experience

- | | |
|---|--|
| <p>2005 Centers for Disease Control Emerging and Infectious Disease Laboratory
R&D Magazine Lab of the Year Special Mention</p> <p>2003 New Jersey Economic Development Authority
International Center for Public Health
R&D Magazine Lab of the Year, Special Mention</p> <p>2004 University of Nebraska Medical Center
Durham Research Center
Omaha, Nebraska
2004 Citation Award
AIA Nebraska
Outstanding Building, Post Secondary</p> <p>2004 U.S. Food & Drug Administration Regional Lab
Irvine, California
R&D Magazine's
Lab of the Year High Honors Award</p> <p>2004 Creighton University, Hixson-Lied Science Building
Omaha, Nebraska
Outstanding Building, Post Secondary
American School & University Magazine</p> <p>2002 University of Virginia Health Sciences Center (MR-5)
Charlottesville, Virginia
Biomedical Engineering and Medical Sciences Building
Architectural Portfolio Outstanding Building
American School & University Magazine</p> | <p>2002 Iowa Western Community College The Arts Center
Council Bluffs, Iowa
AIA Honor Award
AIA New Construction Design Award</p> <p>2001 COLO.com
San Francisco and Emeryville, California
AIA Honor Award</p> <p>2000 Pfizer Inc
Drug Discovery Laboratory, Building 220
R&D Magazine Lab of the Year, High Honors</p> <p>2000 University of California, Riverside Science Library
Riverside, California
Outstanding Building in the Libraries/Media Center Category
American School & University Magazine</p> <p>2000 Johns Hopkins University School of Medicine
Bunting-Blaustein Cancer Research Building
Baltimore, Maryland
Outstanding Building in the Specialized Facility Category
Outstanding Building in the Laboratories Category
American School & University Magazine
ABC Baltimore Metropolitan Award of Excellence</p> <p>2000 First National Bank Technology Center
Omaha, Nebraska
AIA Award of Excellence
AIA Honor Award</p> |
|---|--|

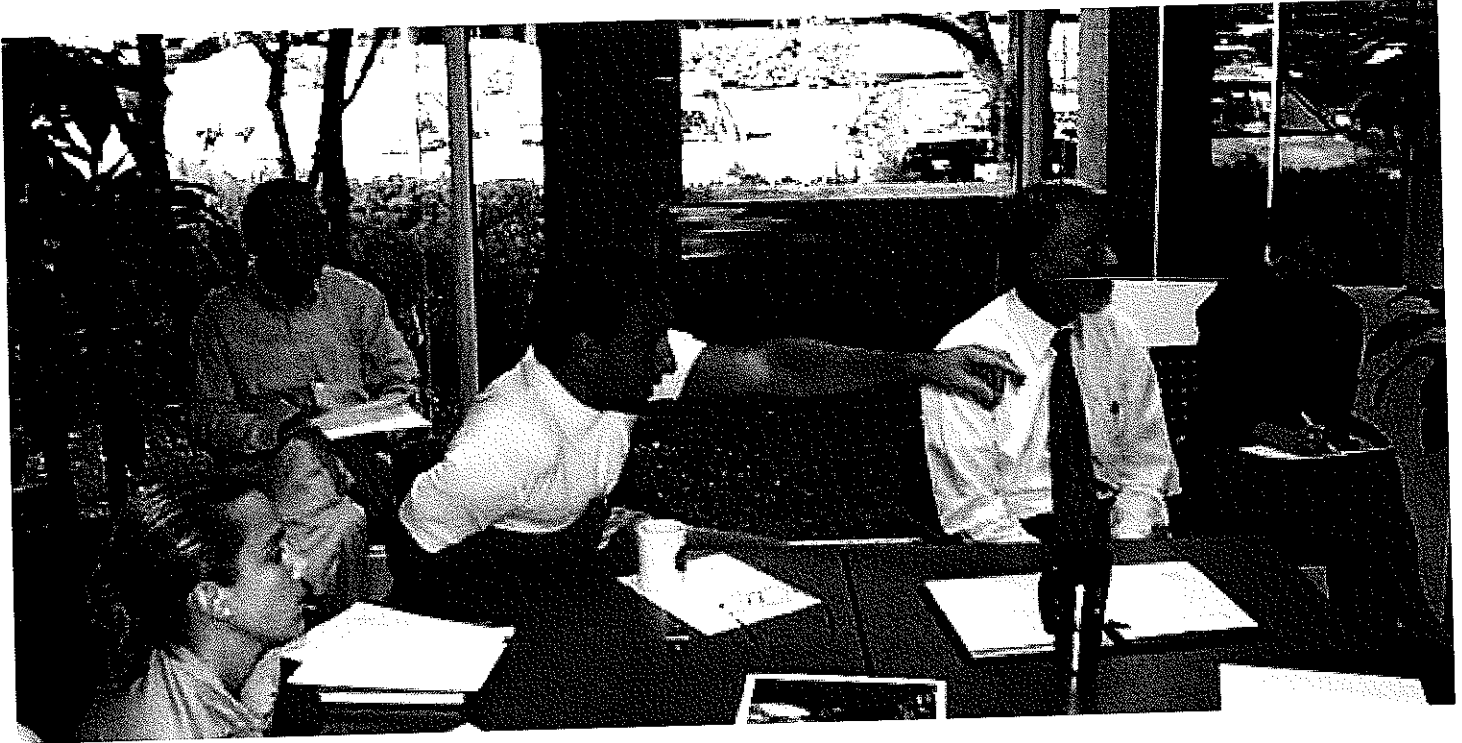


Experience



*Emerging Infectious Diseases Laboratory
Atlanta, Georgia*

Staff & Resources



HDR CUH2A DESIGN TEAM

HDR CUH2A is proposing a truly integrated and proven Architecture and Engineering Design Team for the WV Laboratory Services Facility Improvement Projects. Our teaming approach is based on a core team of senior leaders that will remain consistent throughout the project. Their unique and collective experience will provide this team with the ability to effectively and efficiently address issues of technical, functional, site, aesthetic, sustainability, budget, schedule, and constructability considerations throughout the project process.



Our local partner for the WV Laboratory Services Facility Improvements Projects is Alpha Associates, Inc. Founded in 1969, Alpha Associates has grown from a small structural engineering and architectural firm into one of the largest multi-service design firms in West Virginia. Quality service has been the cornerstone of Alpha Associates, Incorporated from the beginning. The continuous growth at Alpha Associates has benefited clients in Morgantown and throughout West Virginia. West Virginia University and the Robert C. Byrd Health Sciences Center were very early clients, and have remained clients for nearly 38 years. Alpha's expansion in 1995 increased the client base and provided more efficient service for the clients in the Eastern Panhandle. Alpha Associates, Incorporated employs a staff of 43 Architects, Engineers, Surveyors and support staff. The dedication of the staff is what makes Alpha Associates, Incorporated a powerhouse in West

Virginia. Alpha's Corporate Office is located in Morgantown with their Eastern Regional Office located in Martinsburg. In addition, multiple state and county projects. Alpha Associates, Inc.'s project experience includes the following laboratory experience:

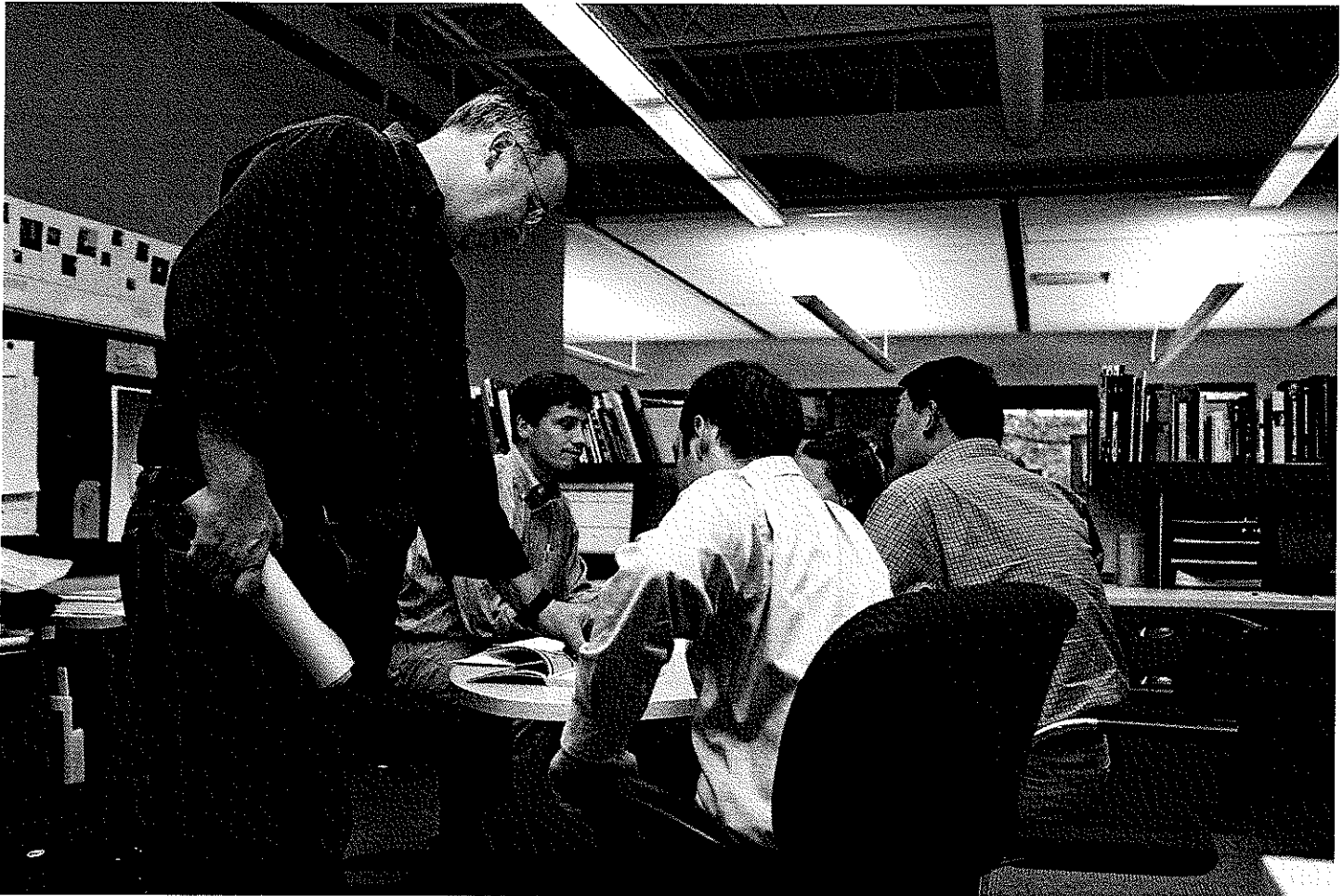
West Virginia University Robert C. Byrd Health Science Center

- Mass Spectrometer and Laboratory
- Physiology Lab
- Pharmacology and Toxicology
- Biochemistry Department Renovation
- Orthopedic Laboratory and Office
- Micro-Pathology Laboratory
- Eastern Division Medical Center
- Gastro Intestinal Research Lab
- Cranial Lab
- Optical Imaging
- Various Animal Quarters (Laboratories and Animal Holding)

West Virginia University

- Engineering Research Building – New Construction
- National Research Center for Coal and Energy – New Construction
- Agricultural Science South – New Construction
- Galli Laboratory – Renovation
- Engineering Science Addition – Addition and Renovation

Staff & Resources



Additionally, HDR CUH2A Team members have a nationally-known, award winning reputation for the innovative design of facilities and a depth of experience in programming, master planning and designing buildings that support initial basic and applied research. We are also mindful of the need to provide lab and office designs that can readily accommodate program changes through flexible strategies employed at the outset of the project

At the heart of HDR CUH2A's success is a teaming approach and structure that is simple, clear and, above all, highly integrated

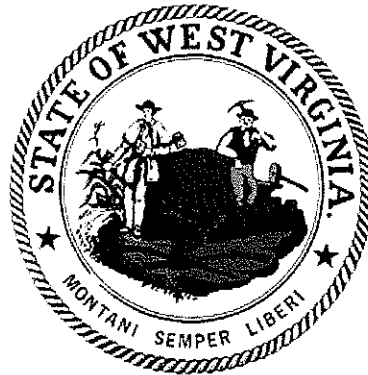
Our successful and effective teaming approach is based on:

- Clearly defined roles and responsibilities
- Direct and open communication between all team members
- Active listening
- Encouragement of creative and innovative concepts
- Respect for decision-making process and direction
- Commitment to achieving project vision and goals

Of equal importance to this common framework for a collaborative work ethic is a serious commitment to an integrated design process. It is well-documented that a highly integrated A/E team - including critical in-house laboratory programming, planning and design specialists that routinely collaborate with acclaimed researchers- create the most innovative and flexible laboratory environments

Staff & Resources

Our proposed organizational chart is below and resumes are provided on the following pages



Project Leadership

Warren Hendrickson, AIA, LEED AP
HDR CUH2A
Principal Planner

Jim Davison, AIA
Alpha Associates, Inc.
Project Manager

Wen Xiao, AIA, LEED AP
HDR CUH2A
Project Director

Core Team

Mark Fitzgerald
HDR CUH2A
Public Health Planner

Matthew Breakey, AIA
Alpha Associates, Inc.
Project Architect

Richard Colebank, PE, PS
Alpha Associates, Inc.
Civil Engineer

Paul Halamar
HDR CUH2A
Plumbing/Fire Protection Engineer

Charles Luttrell, PE
Alpha Associates, Inc.
Structural Engineer

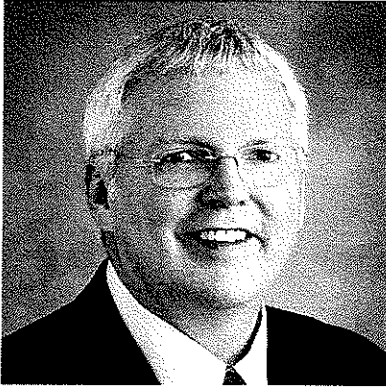
Darren Fritsch, PE, LEED AP
HDR CUH2A
Lead Mechanical Engineer

Dale Peterson, PE, LEED AP
HDR CUH2A
Electrical Engineer

Staff & Resources

Warren Hendrickson, AIA, LEED AP Principal Planner

HDR CUH2A



Mr. Hendrickson has been designing facilities for Science & Technology driven clients for more than 25 years as a laboratory planner, designer, manager or principal-in-charge for academic, government and corporate clients. One passion that has remained steadfast throughout his career has been his unwavering commitment to his clients. Helping clients create a place to foster discovery and to promote health and safety is his motivation. One of his many strengths is his ability to work patiently with end-users to balance their program requirements with the anticipated budget. With his intimate knowledge of the goals, drivers, decision processes and leadership dynamics of these technologically diverse projects, he can challenge preconceived ideas to foster new solutions to traditional planning and design concepts.

CURRICULUM VITAE

Education:

Bachelor of Architecture, University of Illinois Chicago, 1979

Registrations:

Registered Architect: IL, IN, IA, KS, MD, MI, MN, MO, MT, OH, WA, WI
LEED Accredited Professional

Affiliations:

National Council of Architectural Registration Boards
Society for College and University Planning
Association of Public Health Labs

Presentations:

"Making the Shift from Hospital to Integrated Medical Center", Tradeline Academic Medical Centers Conference, San Francisco, California, 10/15/2008, co-presenter with Stanley R. Stark

"HDR CUH2A", Association of Public Health Laboratories Leadership Council, Austin, Texas, 10/1/2008

"Cost Trends: Biomedical vs. Physical Sciences", 2007 Laboratory Design Conference, St. Louis, MO, 9/17/2007, co-presenter with Stanley R. Stark

"Innovators for Public Health", Leadership Council, Atlanta, GA, 10/20/2006

RELEVANT PROJECTS

Indiana Department of Public Health & Forensic Laboratory

75,000GSF of new state-of-the-art laboratories and office space in a modular and laboratory design. The design will emphasize flexibility through an open laboratory design to promote changes in service based upon testing demand. Specialized laboratories designed to Biosafety Level 3 (BSL-3) will be provided to accommodate high hazard testing. The building will house the primary laboratory facilities for the Indiana State Police (ISP), the Indiana State Departments of Health (ISDH) and the department of Toxicology.
Indianapolis IN

University Hygienic Laboratory (UHL), Iowa Public Health Laboratory

As the flagship public health facility for the State of Iowa the design of a new 112,000 gsf facility located on the Oakdale campus will take one of the oldest labs in the country into the 21st century. The University Hygienic Laboratory will provide BSL-3 areas for microbiology for biological, and chemical terrorism, and a glovebox BSL-4 area.
Iowa City, Iowa

State of Hawaii Public Health Facility

Evaluation of the performance criteria of the existing BSL3 suite to meet the criteria established by the guidelines in Biosafety in Microbiological Laboratories (BMBL).
Pearl City, Hawaii

North Carolina State Laboratory for Public Health & Office of the Chief Medical Examiner

The new 220,400 sf facility will house state facilities for the public health laboratory and the chief medical examiner's office that are currently located in Chapel Hill and Raleigh, NC. Pre-design responsibilities included conducting workshops to verify program changes and gap analysis between 2004 needs and 2011 move-in. Design responsibilities focus on the Medical Examiner facilities and workflow.
Raleigh NC

Minnesota Departments of Health & Agriculture, Public Health Facility

169,000 gsf facility to collocate the Minnesota Departments of Health & Agriculture laboratories and offices. The new building will provide state-of-the-art laboratories designed to meet the current and future needs of the state. Chemical, flammable, and biological waste handling and disposal areas are components of the facility. The laboratories provide Public Health and agricultural testing and assessment for the State of Minnesota.
Minneapolis Minnesota

Staff & Resources

Jim Davison, AIA
Project Manager
Alpha Associates, Inc



Mr. Davison is the Vice President of Alpha Associates, Inc. Mr. Davison joined the firm in November of 1977. He became a principal of the firm and Vice President in 1980. He has designed numerous structures, including research facilities, post offices, religious facilities, commercial and office buildings, and educational and medical facilities. The West Virginia Society of Architects has recognized Mr. Davison for his excellence in architecture with design awards for the Engineering Research Building at West Virginia University in Morgantown, WV, Wheeling College Chapel in Wheeling, WV, Morgantown High School Addition in Morgantown, WV and the KCAD Professional Office Building located in Martinsburg, WV.

CURRICULUM VITAE

Education:

Bachelor of Architecture, Pennsylvania State University, 1973

Registrations:

Registered Architect: WV, PA, MD, VA, OH

Affiliations:

National Council of Architectural Registration Boards
American Institute of Architects
West Virginia Society of Architects
Council of Educational Facility Planners International
American Arbitration Association
Interfaith Forum on Religion, Art and Architecture
Main Street Morgantown

RELEVANT PROJECTS

Higher Educational Facilities:

- Agricultural Sciences Building Addition, West Virginia University; Morgantown, WV
- Prichard Hall Renovation, Fairmont State University; Fairmont, WV
- Engineering Science Building, East Wing Addition; Morgantown, WV
- Engineering Research Building; Morgantown, WV
- National Research Center for Coal and Energy, West Virginia University; Morgantown, WV
- Student Leader Housing, West Virginia University; Morgantown, WV
- Galli Laboratory, West Virginia University; Morgantown, WV

K-12 Educational Facilities:

- Washington High School, Charles Town, WV
- Westside High School; Clearfork, WV
- Wyoming East High School; New Richmond, WV
- Lewis County High School; Weston, WV
- Morgantown High School Addition/Renovation; Morgantown, WV
- Ridgedale Elementary School Addition; Morgantown, WV

Medical Facilities:

- Ruby Memorial Hospital Emergency Addition; Morgantown, WV
- Sundale Nursing Home Renovation/Addition; Morgantown, WV

Miscellaneous Architectural Design:

- Upshur County Senior Opportunity Center; Buckhannon, WV
- West Virginia Medal of Honor Recipients Memorial Plaza; Hazelton, WV
- Cumberland Valley Railroad Depot (KCAD Properties Professional Office); Martinsburg, WV
- Ronald McDonald House; Morgantown, WV
- Jenkins Ford; Buckhannon, WV

Staff & Resources

Wen Xiao, AIA, LEED AP
Project Director
HDR CUH2A



As Project Director, Ms. Xiao will monitor all phases of the project and will ensure that the necessary technical and managerial resources are made available to meet a specific project's budget, schedule and level of quality. She is committed to working with the Client to achieve a sustainable built environment through implementing sound environmental strategies throughout the design and construction process. Ms. Xiao brings over 16 years of diversified programming, architectural design, master planning, and historic preservation experience to the team, including managing major science and technology projects

CURRICULUM VITAE

Education:

Master of Architecture, University of Maryland, 1991

Bachelor of Architecture, Tianjin University, 1989

Registrations:

Registered Architect, Washington, DC
LEED Accredited Professional

Affiliations:

American Institute of Architects
National Council of Architectural Registration Boards

RELEVANT PROJECTS

North Carolina State Laboratory for Public Health & Office of the Chief Medical Examiner

The new 220,400 sf facility will house state facilities for the public health laboratory and the chief medical examiner's office that are currently located in Chapel Hill and Raleigh, NC. Pre-design responsibilities included conducting workshops to verify program changes and gap analysis between 2004 needs and 2011 move-in. Design responsibilities focus on the Medical Examiner facilities and workflow.

Raleigh, NC

Maryland Public Health Lab Program Recommendations

For the Maryland Department of Public Health's new 250,000 gsf laboratory facility, HDR CUH2A performed an independent, detailed review of the Program of Requirements (POR), including recommendations for improvements. The proposed facility will consist of six lab divisions: chemistry, virology and immunology, environmental, molecular biology, public health environmental microbiology, and childhood and newborn screening.

Baltimore, MD

Howard Hughes Medical Institute Janelia Farm Research Campus

Howard Hughes Medical Institute is investing \$600 million to fit out labs at its spectacular new Janelia Farms facility. By providing the best infrastructure to support new research, the Institute hopes to attract the finest scientists from all over the world. One such fit-out is the new Electron Microscopy Suite, housing ten low-resolution electron microscopes for high through-put imaging. It is the first microscopy suite of its kind on the east coast.

Ashburn, VA

University of Maryland Physical Science Complex

HDR CUH2A has been selected for the first phase of a three-phased plan to construct a Physical Sciences Complex. This first phase of the project scope is a 142,400 gsf building that will include state-of-the-art research labs, offices, conference rooms, lounge and other support space. Three units will occupy the building in a collaborative research environment with extremely stringent environmental requirements – physics, astronomy, and the Institute for Physical Sciences and Technology. The facility will be designed to meet LEED™ Silver certification standards.

College Park, MD

Staff & Resources

Mark Fitzgerald Public Health Planner *HDR CUH2A*



Mr. Fitzgerald has six years of experience as a laboratory planner. As a laboratory planner, his responsibilities have included programming, code review, engineering systems integration, materials research, equipment selection and specification, schematic design, and cost estimation.

CURRICULUM VITAE

Education:

School of Architecture, Auburn University (Completed 4 years)

Publications/Presentations:

"Introduction to Specifications: General Considerations and Division 1," Planning and Designing Research Animal Facilities, Hessler & Lehner editors, December 2008 (Co-authored with James Riley and Dr. Noel Lehner)

"Safety Practices, Operations and Containment Facilities for Biohazards," Planning and Designing Research Animal Facilities, Hessler & Lehner editors, December 2008 (Co-authored with Jon Crane, Mike Mottet and Dr. Noel Lehner)

CDC Symposium on Biosafety 2008. "Facility Design, ABSL1-4" (Co-presenter with Randy Kray)

APHL Symposium, November 2008 "Trends in Public Health Laboratory Design"

"Animal Biosafety Level 3: Facility Design Considerations," Anthology of BioSafety X: Animal Biosafety, Jonathan Y. Richmond editor, 2007 (Co-authored with Jon Crane and Mike Mottet).

RELEVANT PROJECTS

Indiana Department of Public Health & Forensic Laboratory

75,000GSF of new state-of-the-art laboratories and office space in a modular and laboratory design. The design will emphasize flexibility through an open laboratory design to promote changes in service based upon testing demand. Specialized laboratories designed to Biosafety Level 3 (BSL-3) will be provided to accommodate high hazard testing. The building will house the primary laboratory facilities for the Indiana State Police (ISP), the Indiana State Departments of Health (ISDH) and the department of Toxicology.

Indianapolis, IN

Virginia Biotechnology Research Park, Division of Consolidated Laboratory Services

HDR CUH2A and McKinney & Company are providing architectural and lab design, lab programming, and engineering for the 191,000 sf Division of Consolidated Laboratory Services facility. The facility will support governmental agencies, hospitals, health departments, and law enforcement agencies with a diverse array of testing and analytical services, including areas for responding to biological and chemical terrorism. The laboratories include BSL-2, BSL-3, BSL-3 enhanced, and BSL-4 glove boxes.

Richmond, VA

Minnesota Departments of Health & Agriculture, Public Health Facility

169,000 gsf facility to collocate the Minnesota Departments of Health & Agriculture laboratories and offices. The new building will provide state-of-the-art laboratories designed to meet the current and future needs of the state. Chemical, flammable, and biological waste handling and disposal areas are components of the facility. The laboratories provide Public Health and agricultural testing and assessment for the State of Minnesota.

Minneapolis, Minnesota

Maryland Public Health Lab Program Recommendations

For the Maryland Department of Public Health's new 250,000 gsf laboratory facility, HDR CUH2A performed an independent, detailed review of the Program of Requirements (POR), including recommendations for improvements. The proposed facility will consist of six lab divisions: chemistry, virology and immunology, environmental, molecular biology, public health environmental microbiology, and childhood and newborn screening.

Baltimore, MD

Staff & Resources

Matthew Breakey, AIA Project Architect *Alpha Associates, Inc*



Mr. Breakey has gained experience through working as a Project Manager on major capital construction projects throughout West Virginia. As a key player in the Open End Contract with West Virginia University, Mr. Breakey deals with projects from schematic design to project close out

CURRICULUM VITAE

Education:

Bachelor of Architecture, Pennsylvania State University, 1992

Bachelor of Science, Architecture, Pennsylvania State University, 1991

Registrations:

Registered Architect: WV, MD

Affiliations:

National Council of Architectural Registration Boards

American Institute of Architects

West Virginia Society of Architects

The Council of Educational Facility Planner International

Main Street Morgantown Board of Directors; Member

Main Street Morgantown Design Committee; Chairman

Chestnut Ridge Park Board; President

RELEVANT PROJECTS

Higher Education Projects:

- WVU Engineering East Wing Renovation/Addition; Morgantown, WV
- WVU Engineering Sciences Building 10th Floor Renovation; Morgantown, WV
- WVU Engineering Science Building Nano/Microtechnology Lab; Morgantown, WV
- WVU Alfred F. Galli Laboratory Renovations; Morgantown, WV

K-12 Education Projects:

- South Jefferson High School, Charles Town, WV
- Pocahontas County High School Science Wing Renovation/Addition; Marlinton, WV
- Buckhannon Upshur Middle School Roof Replacement; Buckhannon, WV
- Buckhannon Upshur Middle School HVAC Upgrades; Buckhannon, WV
- Slanesville Elementary School Addition; Hampshire County, WV
- Petersburg High School Science Lab Renovation; Petersburg, WV

Miscellaneous Architectural Design:

- Clear Mountain Bank, Oakland Branch; Oakland, MD
- Fairmont Federal Credit Union, Charles Pointe Branch; Bridgeport, WV
- WVU Engineering Sciences Building East Wing Addition; Morgantown, WV
- Robert C. Byrd Health Sciences Center SRP Lab Renovation; Morgantown, WV
- Upshur County Senior Opportunity Center Renovation and Addition; Buckhannon, WV
- Summersville Municipal Building; Summersville, WV
- Hart Field Air Rescue Fire Fighting Building; Morgantown, WV
- Bruceton Bank, Sabraton Branch; Morgantown, WV
- Camp Dawson Billeting Facilities; Kingwood, WV

Staff & Resources

Richard Colebank, PE, PS
Civil Engineer
Alpha Associates, Inc



Mr. Colebank is President and Chief Operating Officer of the firm. Mr. Colebank has been with Alpha Associates, Incorporated since 1985. He began his career with Alpha as a staff engineer and progressed through the ranks from Project Manager to his current position. Mr. Colebank has worked with diverse clients such as West Virginia University, City of Morgantown, The West Virginia Division of Highways, WVU Foundation and the Morgantown Municipal Airport, as well as numerous private clients. Since 1988, Mr. Colebank has been the Principal-In-Charge of many of the Civil Engineering projects developed at Alpha. In his current capacity, Mr. Colebank provides financial and administrative guidance for the day-to-day operations of the company while continuing to manage Civil Engineering Projects.

CURRICULUM VITAE

Education:

Master of Business Administration,
West Virginia University, 1999

Bachelor of Science, Civil Engineering,
1982

Registrations:

Professional Engineer: WV, MD, VA, OH
Professional Surveyor, West Virginia

Affiliations:

West Virginia Society of Professional
Engineers

American Society of Civil Engineers

Former NSPE/PEPP Governor of WV
ACEC/WV; President

RELEVANT PROJECTS

Civil Engineering Projects:

- Monongalia General Hospital;
Morgantown, WV
- WVU Research Park; Morgantown, WV
- West Virginia Medal of Honor Recipients
Plaza; Hazelton, WV
- West Virginia Division of Highways I-77
Welcome Center; Williamstown, WV
- West Virginia High Technology
Consortium Site Work; Fairmont, WV
- Greystone on the Cheat through Phase II;
Morgantown, WV

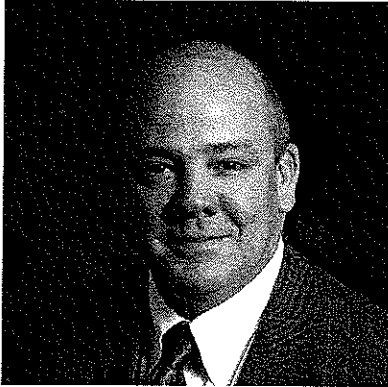
Indefinite Delivery/Indefinite Quantity

Contracts:

- Morgantown Municipal Airport Open
End Contract; Morgantown, WV
- West Virginia Division of Highways Open
End Contract; State of WV
- National Energy Technology
Laboratories; Morgantown, WV
- West Virginia University Open End
Contract; State of WV

Staff & Resources

Charles Luttrell, PE
Structural Engineer
Alpha Associates, Inc



Mr Luttrell has worked with Alpha Associates, Inc since 1996. He is the chief structural engineer for Alpha on all projects at Alpha. Before coming to Alpha, Mr Luttrell's graduate work resulted in several contributions to the cold-formed steel deck industry. His new method of analysis for non-uniform loads on composite concrete and cold-formed steel decks has been made a permanent part of the Steel Deck Institute's design manual. Mr Luttrell also worked on projects that involved pre-stressed timber bridge research with the West Virginia University Constructed Facilities Center. Since coming to Alpha, Mr. Luttrell has had a significant involvement in the effort to begin utilizing modern composite materials in practical bridge applications. Two recent Alpha bridge projects have been designed using these innovative materials.

CURRICULUM VITAE

Education:

Master of Science, Structural Engineer,
West Virginia University, 1995

Bachelor of Science, Civil Engineer,
West Virginia University, 1993

Registrations:

Professional Engineer: WV, MD

Affiliations:

West Virginia Society of Professional
Engineers

National Society of Professional
Engineers

Chi Epsilon

American Concrete Institute

Structural Engineering Certification
Board

RELEVANT PROJECTS

Structural Engineer Experience

- Hazel Ruby McQuain Amphitheater Roof,
Morgantown, WV
- West Buckeye Bridge, Core, WV
- South Jefferson High School, Charles
Town, WV
- WVU Coliseum Asbestos Abatement
Project (Scaffolding Design and Dome
Structural Inspection); Morgantown, WV
- Morgantown Airport Air Rescue and
Firefighting Building; Morgantown, WV
- WVU Coliseum Scoreboard Hoist Project;
Morgantown, WV

Project Manager Experience

- Blackshere Bridge; Mannington, WV
- South High Street Bridge; Morgantown,
WV
- Market Street Bridge; Wheeling, WV
- West Buckeye Bridge; Core, WV
- Simpson Creek Covered Bridge; Marion
County, WV
- Fletcher Covered Bridge; Marion County,
WV
- Elkins Bypass, Spur A Bridge; Elkins, WV

Staff & Resources

Darren Fritsch, PE, LEED AP Lead Mechanical Engineer HDR CUH2A



Mr Fritsch brings more than 15 years of experience that includes all phases of HVAC engineering from initial design concepts and optimization comparisons through construction documentation, specifications and construction administration. His mechanical experience includes system design and engineering management for all building types. He is equally experienced in designing systems for new buildings as well as systems meant to be integrated within existing facilities.

CURRICULUM VITAE

Education:

Bachelor of Science, Architectural Engineering, Drexel University, 1995

Registrations:

Professional Engineer, Virginia, 2000
LEED Accredited Professional

Affiliations:

Labs for the 21st Century
American Society of Heating Refrigeration Air Conditioning Engineers

Publications:

Co-Author of Labs for the 21st Century for EPC #7

RELEVANT PROJECTS

Maryland Public Health Lab Program Recommendations

For the Maryland Department of Public Health's new 250,000 gsf laboratory facility, HDR CUH2A performed an independent, detailed review of the Program of Requirements (POR), including recommendations for improvements. The proposed facility will consist of six lab divisions: chemistry, virology and immunology, environmental, molecular biology, public health environmental microbiology, and childhood and newborn screening.
Baltimore, MD

North Carolina State Laboratory for Public Health & Office of the Chief Medical Examiner

The new 220,400 sf facility will house state facilities for the public health laboratory and the chief medical examiner's office that are currently located in Chapel Hill and Raleigh, NC. Pre-design responsibilities included conducting workshops to verify program changes and gap analysis between 2004 needs and 2011 move-in. Design responsibilities focus on the Medical Examiner facilities and workflow.
Raleigh, NC

District of Columbia Public Health Annex Architecture Consulting Services

HDR CUH2A is providing consulting services in support of DC Public Health's preparation of a request for proposal (RFP) for an interim Public Health Laboratory Annex facility containing a 5,000 gsf temporary BSL-2/3 laboratory and support facilities.
Washington, DC

Howard Hughes Medical Institute Janelia Farm Research Campus

Howard Hughes Medical Institute is investing \$600 million to fit out labs at its spectacular new Janelia Farms facility. By providing the best infrastructure to support new research, the Institute hopes to attract the finest scientists from all over the world. One such fit-out is the new Electron Microscopy Suite, housing ten low-resolution electron microscopes for high through-put imaging. It is the first microscopy suite of its kind on the east coast.
Ashburn, VA

Armed Forces Research Institute of Medical Sciences, Master Plan

Master planning for the joint Royal Thai Army – US Army medical research organization located in Bangkok, Thailand. Planning scope included evaluation of existing conditions, user needs programming, space planning, preliminary engineering approaches, and conceptual cost estimating to replace or upgrade 161,000 sf.
Bangkok, Thailand

Staff & Resources

Dale Peterson, PE, LEED AP Electrical Engineer *HDR CUH2A*



A 25-year HDR CUH2A employee and Director of HDR CUH2A's Electrical Engineering Group, Mr Peterson will lead the electrical design activities. His engineering experience includes design of power distribution systems, telecommunication systems, security systems, and emergency power generation systems for diverse project types including campus environments, government projects, laboratories and correctional facilities

CURRICULUM VITAE

Education:

Bachelor of Science, Electrical Engineering, Rutgers University, 1973

Registrations:

Professional Engineer: AL, CT, FL, GA, IA, KY, LA, MA, MD, NJ, OH, PA, TX

RELEVANT PROJECTS

University Hygienic Laboratory (UHL), Iowa Public Health Laboratory

As the flagship public health facility for the State of Iowa the design of a new 112,000 gsf facility located on the Oakdale campus will take one of the oldest labs in the country into the 21st century. The University Hygienic Laboratory will provide BSL-3 areas for microbiology for biological, and chemical terrorism, and a glovebox BSL-4 area

Iowa City Iowa

University of Maryland Physical Science Complex

HDR CUH2A has been selected for the first phase of a three-phased plan to construct a Physical Sciences Complex. This first phase of the project scope is a 142,400 gsf building that will include state-of-the-art research labs, offices, conference rooms, lounge and other support space. Three units will occupy the building in a collaborative research environment with extremely stringent environmental requirements -- physics, astronomy, and the Institute for Physical Sciences and Technology. The facility will be designed to meet LEED™ Silver certification standards

College Park MD

US Army Medical Research Institute for Infectious Diseases Stage I Replacement Facility

Building upon previous HDR CUH2A master planning for the National Interagency Biodefense Campus, HDR CUH2A developed advanced planning and detailed design for the 835,390 sf replacement building of USAMRIID's biomedical containment research facilities. The state-of-the-art facility will significantly increase laboratory and vivarium research capabilities for BSL-2, BSL-3E and BSL-4 spaces, the state-of-the-art facility will be the largest biocontainment laboratory building in the world

Ft Detrick MD

University of Alabama at Birmingham Shelby Interdisciplinary Research Building

HDR CUH2A designed this new 310,000 sf bio-medical research facility to complement the Georgian style campus, and to develop an architectural design vocabulary to provide consistency for future construction. The new facility houses researchers who were formerly located in twenty-seven different types of laboratories in four prototypes configured to be used independently or together.

Birmingham AL

Staff & Resources

Paul Halamar Plumbing/Fire Protection *HDR CUH2A*



During Mr. Halamar's 34 years of professional engineering experience, he has regularly interfaced with outside consultants and has developed an expertise of plumbing and fire protection systems. He is experienced in the design and engineering of domestic cold and hot water, sanitary waste, animal waste, animal drinking water, medical and industrial gases, acid neutralizing and drainage systems. In addition, he serves as Professor of Environmental Systems at Drexel University.

CURRICULUM VITAE

Education:

Bachelor of Science, Plumbing Design,
Indiana Institute of Technology, 1973

Affiliations:

International Society of
Pharmaceutical Engineering

RELEVANT PROJECTS

North Carolina State Laboratory for Public Health & Office of the Chief Medical Examiner

The new 220,400 sf facility will house state facilities for the public health laboratory and the chief medical examiner's office that are currently located in Chapel Hill and Raleigh, NC. Pre-design responsibilities included conducting workshops to verify program changes and gap analysis between 2004 needs and 2011 move-in. Design responsibilities focus on the Medical Examiner facilities and workflow.
Raleigh, NC

California Department of Public Health Viral and Rickettsial Laboratory

This Select Agent laboratory will provide BSL-3e containment facilities for diagnostics and specimen testing of the avian influenza virus and other highly pathogenic agents. The lab renovations will occupy about 2000 sf in Building C of the Department's Richmond campus.
Richmond, CA

New Jersey Public Health Environmental and Agriculture Laboratory

Study to assist the public health and environmental agencies in planning a new health and agriculture laboratory complex to replace current facilities. Includes Programming, Feasibility Study and Business Planning services.
West Trenton, NJ

University of Maryland Physical Science Complex

HDR CUH2A has been selected for the first phase of a three-phased plan to construct a Physical Sciences Complex. This first phase of the project scope is a 142,400 gsf building that will include state-of-the-art research labs, offices, conference rooms, lounge and other support space. Three units will occupy the building in a collaborative research environment with extremely stringent environmental requirements -- physics, astronomy, and the Institute for Physical Sciences and Technology. The facility will be designed to meet LEED™ Silver certification standards.
College Park, MD

University of Alabama at Birmingham Shelby Interdisciplinary Research Building

HDR CUH2A designed this new 310,000 sf bio-medical research facility to complement the Georgian style campus, and to develop an architectural design vocabulary to provide consistency for future construction. The new facility houses researchers who were formerly located in twenty-seven different types of laboratories in four prototypes configured to be used independently or together.
Birmingham, AL

Staff & Resources

FIRM RESOURCES

To assure accuracy of drawings and compatibility of materials the HDR CUH2A team will utilize our Quality Management Program that has been successfully implemented on numerous projects for our government, academic and corporate clients nationwide

Quality Program

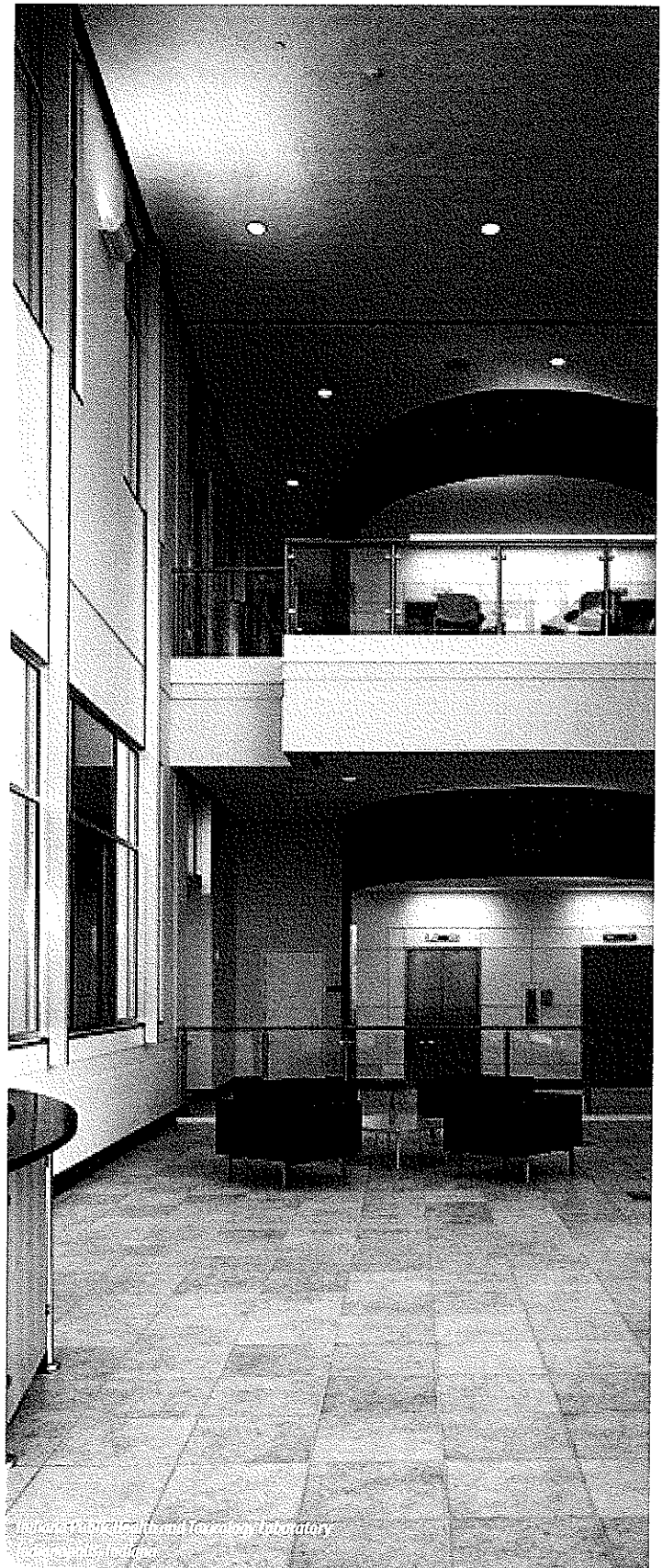
The primary goal of the HDR CUH2A quality program is to ensure that customer expectations and all regulatory requirements are met. We believe the HDR CUH2A quality program is unique in the architectural engineering industry in that every graphic document and supporting specification section generated is tracked from its inception through to the actual construction administration phase of the project. The HDR CUH2A commitment to quality is time-tested and ever present.

HDR CUH2A views quality assurance and quality control as ongoing activities throughout the design and documentation process. Quality guidelines, instrumental to the culture of HDR CUH2A, have been in place for approximately 40 years. This everlasting commitment to quality, in combination with internal controls and the constant interaction with our clients enhances the quality of our work. As a preamble to the HDR CUH2A quality program, the objectives of the program are expressed within Quality Management Program manual – a document defining 15 standards of performance ranging from Project team responsibilities to Verification and Security principles.

The HDR CUH2A Quality Program, in action, is a study of acute attention to detail, linked to a specific document delivery schedule consisting of quality milestones representing our Client's goals and the accountability of the CUH2A project team.

The HDR CUH2A Quality Management Program (QMP) is structured to assure that quality principles are applied consistently throughout the entire cycle of design and contract document development; remaining in place throughout the construction administration phase of a project. The backbone of the QMP is an interactive data collection tool, identified as the QA WebTool, which is receptive to any quality comment produced by any individual project team member, peer reviewer, cross-discipline reviewer, as well as any retained HDR CUH2A consultant.

This application of solid Quality principles is a continuous process, involving the entire project team, beginning with initial planning and proceeding through all subsequent project documentation phases.



West Virginia Office of Laboratory Services
Government Building

Staff & Resources

Quality Planning

The overall planning process is critical to the success of any project, so a team must focus effort up front to map out a strategy for success. This planning process will develop an approach to the coordination and resolution of the project issues that may compete and overlap with one another, such as:

- Alignment of design approvals, cost, and delivery milestones
- Balance among functional, operational and life-cycle issues
- Site opportunities and constraints
- Availability of team members

Work Management Plan and Scheduling: Our work management plan is a task and milestone based system, developed by the design team to identify all of the critical and interrelated programming and design tasks necessary to gain approval and meet the milestones for the project's success.

Availability of Resources and Tracking: Our work management plan is linked to our resource and accounting system, for real-time reporting and tracking of our progress. Our management plan and reporting will forecast these resources for the entire duration of the project.

Preview . Review . and Endorse Process: One of the aspects of our managed design techniques is our "Preview, Review and Endorse" process developed to introduce and provide background information on issues for decisions (Endorsements or Approvals), at several earlier stages in the design process.

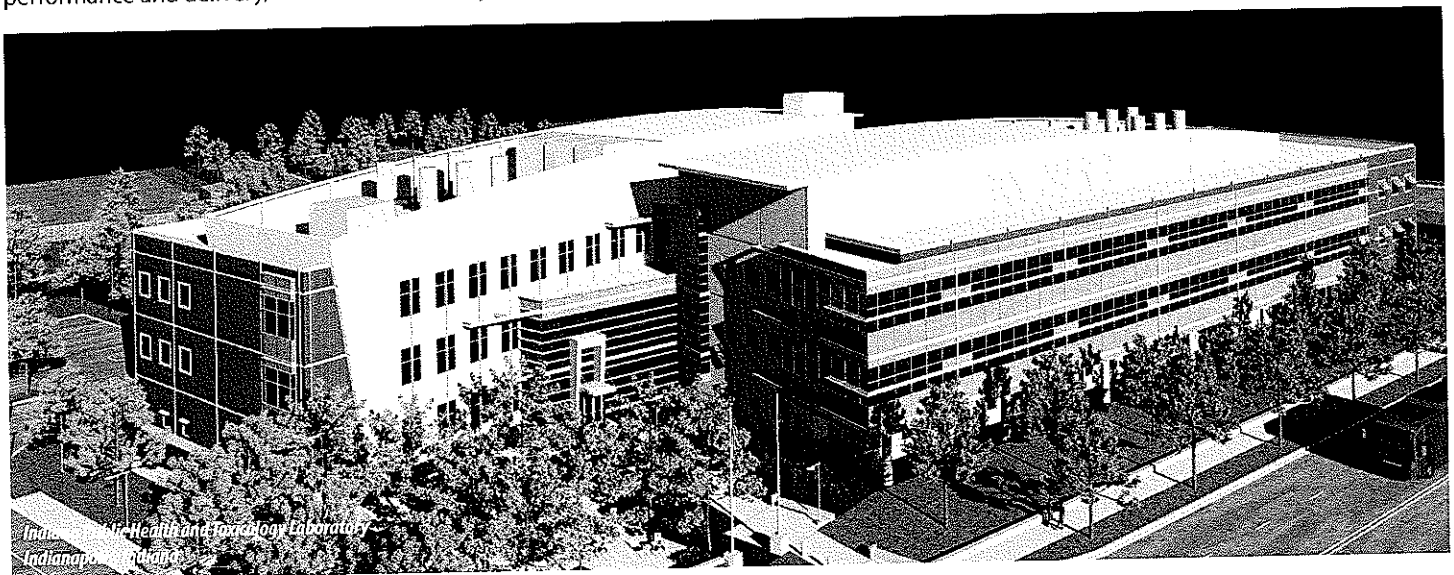
Web-based Documentation Control ("ActiveProject"): In order to facilitate the timely issue, retrieval, access and coordination of the volume of correspondence, reports, drawings, sketches, criteria, etc., on this project, we propose the use of our Active Project web-based document control system, to allow multiple remote user controlled access

Continuous Value Management and Value Engineering: In addition to the formal milestone Value Engineering sessions that will be scheduled during the design process, our success in maintaining and controlling the cost on our projects includes our careful and continuous attention to Value Management (VM) during all phases of the design.

Building Information Modeling: Our team is currently one of the industry leaders in the introduction and use of Building Information Modeling (BIM) in laboratory, vivarium and high-containment design for coordination and cost control.

Coordination of In-house Disciplines and Sub-consultants: Communication is one cornerstone of a successful coordination strategy. Coordination and communication efforts must extend to every member of the project team, including CLIENT NAME personnel and each sub-consultant

Standards for Performance and Delivery: The overall initial planning effort and work management plan will establish the standards for performance and delivery, which will be used by the team to monitor and assure the quality of the design.



Staff & Resources

Quality Assurance

Quality Assurance is our process of monitoring and adjusting the tasks, requirements, milestones and deliverables developed in the work plan to achieve the goals and objectives set by the team at the initiation of the project. The principles of: quality assurance of the design; cost adherence; and schedule compliance are all integral not only to our Quality Controls standards and process, but also to the very culture of our team.

Client Project Execution Plan: As part of our standards for quality, our project management team will develop and submit for review a "Project Execution Plan." This incorporates our standard quality assurance/quality control procedures and processes, along with the project-specific requirements, into a single manual for CLIENT NAME and the team to use as a guide for performance. This project execution plan will be used to set the benchmark for quality and will incorporate the organization/communication plan, team roles and responsibilities, developed during the project initiation, including:

- CAD drafting standards
- Methods of Building and Engineering Calculation
- Design Phase Quality Review Checklists
- Systems Design Standards
- Manner of record-keeping and reporting
- Value analysis, criteria and change tracking log formats, etc.

Quality Control

Once the tasks, methods and standards are determined for this project, the team will monitor the project's quality in terms of meeting the criteria and standards set above. This will be accomplished through a series of formal and informal methods and activities to include:

- Regularly scheduled in-house team meetings
- Formal design and coordination meetings
- Periodic formal document reviews
- Periodic BIM cross-coordination checks
- Formal Design Peer Review sessions
- Design phase checklist reviews
- Departmental and discipline QA/QC reviews
- Informal cross-discipline coordination meetings.

Continuity of Key Team Members During Construction: One of the ways in which we support design quality during the bidding and construction phases is by maintaining the continuity of our key design staff during the construction. We have found that the team which knows the design intent and developed the documents has the greatest ability to identify and maintain the quality of the approved design during construction. To this end, our work management plan and resource allocation schedule is maintained all of the way through construction to schedule the key team's involvement in critical construction and commissioning activities.

Construction Management

Construction Management Plan

The Construction Administration phase begins with the issue of documents for bidding, permit or construction. As Architect and Engineer of more than 200 million square feet of laboratories built over the past 20 years, HDR CUH2A has performed construction administration services on each one of its laboratory projects while these were under construction. As the responsible design professionals of record, it is the duty of HDR CUH2A to work with the Owner, Construction Manager, or Contractors to ensure that the projects are constructed in compliance with the construction documents prepared by HDR CUH2A and our consultants. HDR CUH2A performs this construction administration services through activities such as: manufacturer and contractor pre-qualification, constructability reviews, factory reviews, permit meetings and facilitation, responding to requests for information, fabrication submittal (shop drawing) reviews, construction observation visits, start up assistance, facility operation training and full time on site representation. Typically, these services are provided by members of the project team who designed and documented the project supplemented by Construction Administration specialists both on and off site. HDR CUH2A has provided full time on site construction administration on many projects including:

Confidential Client, Pennsylvania

350,000 sf Toxicology Facility

On Site Representation - ground breaking through commissioning (28 month assignment)

Project features housing for canines, rodents and non-human primates. The facility also includes laboratories, offices, maintenance and conference spaces.

Pfizer Inc., Groton, Connecticut

574,000 sf Drug Discovery Laboratory

On Site Representation - ground breaking through occupancy (39 month assignment)

Project co-locates 800 scientists and support staff. Flexible, modular laboratory and office design promotes safety and process integration with the sharing of information across disciplines through "research villages". Includes chemistry for high potency compounds, biology, and drug metabolism; tissue culture suites; and mass-spectrometer and NMR laboratories. Includes 107,000 sf multiple-species vivarium, designed to AAALAC standards. Features 22,000 sf multi-function atrium with lecture area and cafe. Project received "High Honors" in the 2001 Laboratory-of-the-Year category from R&D Magazine.



Drug Discovery Laboratory
Groton, Connecticut

Construction Management

Bristol-Myers Squibb Company, Hopewell, New Jersey

800,000 sf Research Campus Renovation, Upgrade, and Fit-out

On Site Representation - demolition through occupancy (8 month assignment)

Project includes renovation, upgrade and fit-out of existing office space, computer facilities, research laboratories, and infrastructure located on an existing 443-acre, 20-building R&D campus formerly occupied by Mobil Corporation for petroleum research. Each project required close coordination with user groups and BMS facility personnel, as all projects are completed using phased construction while buildings are occupied.

Pfizer Inc., Groton, Connecticut

172,000 sf Drug-Safety Evaluation Facility Expansion

On Site Representation - ground breaking through occupancy (26 month assignment)

Facility includes 87,000 sf of vivarium space and 8,000 sf of associated toxicology laboratories. Vivarium space includes 20 companion animal-holding rooms, procedure rooms, quarantine rooms, necropsy suite and surgical suites.

Managing Project Time Lines

HDR CUH2A's approach to scheduling is based on the principle that to be effective a schedule must be:

- Simple
- Usable
- Measurable

Our schedule methodology accomplishes all three goals. Using readily available computer software, HDR CUH2A will rely on several methods from basic bar charts to more complex CPM networks to indicate time durations for various tasks for the Project. To guide the project through each Phase of Service, HDR CUH2A will develop a detailed schedule as part of an overall Project Work Plan that defines the responsibilities of all team members.

For a project to be successful it is necessary for all stakeholders to understand and commit to a sense of urgency. The Owner's representatives must be given the authority to make timely decisions. A schedule must be established at the beginning that includes input from all stakeholders in terms of adequate review times and time allotted for each phase and each deliverable. Once the schedule is approved by all, it must be constantly monitored and driven to conclusion with strong leadership, collaboration and team work.

As part of this schedule, major groups of tasks will be identified that will provide a framework for the performance of all architectural, planning and engineering disciplines on the project. These task groupings are like a "script" that will direct the activities of every participant on the project team. By using the appropriate script, every team member will know his or her role in accomplishing the intended schedule. Groups of tasks, or scripts, will be related to specific time frames within the overall project schedule. At appropriate points during the work, so called "milestone points," HDR CUH2A will check the amount of work accomplished by each team member against his scripted requirement, and in doing so provide an easy measure of compliance with the project schedule. HDR CUH2A's success in applying the principles of simplicity, usability and measurability supports our reliance on this as a property method controlling project schedules.

Project Name	Scheduled Design Completion	Actual Design Completion	Working Drawings Completion Scheduled	Working Drawings Completion Actual	Construction Completion Scheduled	Construction Completion Actual
University of Alabama at Birmingham	11/03	11/03	5/04	4/04	12/05	12/05
Georgia Tech Molecular Science & Engineering Building	10/04	10/04	2/05	2/05	7/06	7/06

Construction Management

As testimony to the value of our breadth of experience, a list of three projects appears below, illustrating the cost of Change Orders against the established budgets

Project Name	Initial Contract	No. of C.O.'s	Total Cost of C.O.'s	Total of Client Initiated C.O.'s
University of Alabama at Birmingham Interdisciplinary Biomedical Research Institute	\$61.3 M	180		\$326,000
Rutgers Life Sciences/Genetics/Biomaterials Building	\$23 M	158	\$2.8 M	80 CO's were Client initiated
Georgia Tech Molecular Science & Engineering Building	\$63 M	55	\$1.9 M	\$1.1 M



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**Request for
 Quotation**

RFO NUMBER
LBS90030

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
304-558-0067

VENDOR

HDR CUH2A
 7200 Wisconsin Avenue
 Suite 501
 Bethesda, MD 20814

SHIP TO

HEALTH AND HUMAN RESOURCES
 BPH - LABORATORY SERVICES
 167-ELEVENTH AVENUE
 SOUTH CHARLESTON, WV
 25303 304-558-3530

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
01/28/2009				
BID OPENING DATE: 02/12/2009		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 1						
1. QUESTIONS AND ANSWERS ARE ATTACHED.						
2. ADDENDUM ACKNOWLEDGEMENT IS ATTACHED. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID.						
EXHIBIT 10						
REQUISITION NO.: LBS90030						
ADDENDUM ACKNOWLEDGEMENT						
I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.						
ADDENDUM NO.'S:						
NO. 1 <input checked="" type="checkbox"/>						
NO. 2 <input type="checkbox"/>						
NO. 3 <input type="checkbox"/>						
NO. 4 <input type="checkbox"/>						
NO. 5 <input type="checkbox"/>						
I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.						

SIGNATURE <i>Warren J. Hull</i>				SEE REVERSE SIDE FOR TERMS AND CONDITIONS	
TITLE Principal		FEIN 47-0353452	TELEPHONE 301.551.1212	DATE February 11, 2009	
ADDRESS CHANGES TO BE NOTED ABOVE					

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
 LBS90030

PAGE
 2

ADDRESS CORRESPONDENCE TO ATTENTION OF:
 ROBERTA WAGNER
 304-558-0067

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE
 HDR CUH2A
 7200 Wisconsin Avenue
 Suite 501
 Bethesda, MD 20814

SHIP TO

HEALTH AND HUMAN RESOURCES
 BPH - LABORATORY SERVICES
 167-ELEVENTH AVENUE
 SOUTH CHARLESTON, WV
 25303 304-558-3530

DATE PRINTED 01/28/2009	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
----------------------------	---------------	----------	--------	---------------

BID OPENING DATE: 02/12/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.</p> <p style="text-align: center;"><i>Wayne Hull</i> SIGNATURE HDR Architecture, Inc. (HDR CUH2A) COMPANY February 11, 2009 DATE</p> <p>REV. 11/96</p> <p style="text-align: center;">END OF ADDENDUM NO. 1</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Wayne Hull</i>	TELEPHONE 301.551.1212	DATE February 11, 2009
TITLE Principal	FEIN 47-0353452	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'