



Life Sciences Merrick Qualifications



MERRICK®

www.merrick.com



Ryan N Burnette,
Ph.D., MBA

**Vice President,
Life Sciences**



“Life Sciences

*Is more than a market to Merrick. It's the engine that powers the bioeconomy we all depend on. At Merrick, our architects, engineers, and scientists approach every laboratory and program with a focus on **making science happen.**”*



MERRICK BY THE NUMBERS



FOUNDED
in **1955**



EMPLOYEES
850+

26

OFFICES in

4

COUNTRIES

4 PRIMARY
MARKETS



and **13**
STATES

80% 

of clients are
**REPEAT
CUSTOMERS**



7

CONTINENTS
worked on

MARKETS



ENERGY

Merrick has effectively served the process industries for more than three decades. Working closely with our clients, we deploy state-of-the-art engineering, design, and capital cost estimating tools to arrive at targeted solutions.



LIFE SCIENCES

For nearly 30 years, Merrick has provided solutions for science through our work in facilities and lab design, operations and transition planning, forensic and certification assessments, and biosafety and biosecurity.



NATIONAL SECURITY

Merrick provides engineering, architectural, geospatial, and survey services for the Department of Defense, NASA, the Department of Energy, National Nuclear Security Administration, and other government entities.



INFRASTRUCTURE

Infrastructure has been one of our core markets since Merrick's founding. Since then we've grown to include: land development, transportation, water, and white water.



SERVICES



ENGINEERING



ARCHITECTURE



DESIGN-BUILD



CONSULTING



COMMISSIONING



GEOSPATIAL



SURVEYING



LANDSCAPE
ARCHITECTURE



SCIENCE &
TECHNOLOGY



26 OFFICE LOCATIONS



EXPERIENCE GLOBALLY



Why Do We Do What We Do?

“Why” is more important than “what.”



- **Life Sciences Business Unit**
 - Design, Construction Phase and Commissioning
 - Engineers
 - Architects
 - Designers
 - Scientists
 - Physicians
 - Veterinarians
 - Public Health Professionals
 - Biotechnologists
 - Biosafety & Biosecurity Professionals
 - IT & Cybersecurity
 - Risk & Threat Management



Merrick & Company

Life Sciences Overview



LIFE SCIENCES

FEDERAL

ACADEMIC

PUBLIC HEALTH

BIOPHARMA & BIOTECH

HEALTHCARE

INTERNATIONAL

COMMERCIAL



Design

Laboratory Planning

Master Planning

Mechanical/HVAC

Electrical

Civil/ Structural



Commissioning

Agent Services

Owner's Representative

Design Phase Planning

Retro-Commissioning

Performance Verification



Science & Technology

Biosafety & Biosecurity

Biotechnology

Cybersecurity

Operational & Transition Planning

Global Health Security

LIFE SCIENCES

WHAT WE DO



SERVICES

Architecture/Engineering Design
Commissioning
Science & Technology Consulting



FACILITY TYPES

Biocontainment Laboratories
Research & Development Labs
Diagnostic Labs
Renewable Energy Research
Laboratories
Animal/Plant/Human Health Labs
Liquid & Solid Waste Management
Systems
Biosecurity/Biosafety
Chemical, Biological, Radiological
Labs
Nuclear Energy Research Facilities
Cleanrooms
Environmental Chambers
Gloveboxes
Isolation Barriers
Remote Material Handling
Germplasm Repositories
Pharmaceutical Research,
Development and Manufacturing
Specialized Outpatient Medical
Clinics



SME'S

Lab Planners
Architects
MEP Engineers
Structural Engineers
Commissioning Agents
Scientists
Physicians
Veterinarians
Public Health Professionals
Biotechnologists
Biosafety and Biosecurity
Professionals
IT & Cybersecurity
Risk and Threat Management

GORGAS INSTITUTE



SUSTAINABLE DESIGN
WORKPLACE SAFETY
EMISSION REDUCTION



MASTER PLAN &
SCHEMATIC DESIGN
COST ANALYSIS
TECHNICAL STUDY



1 CAMPUS; 8 BUILDINGS
7,952 SQ. FT.
INTEGRATED DESIGN
DECISION PROCESS (IDP)

US Department of Agriculture **National Bio & Agro Defense Facility**



RESEARCH LABORATORY

520,000 SF

\$978 MILLION

BSL-2, 3, 3E, 3Ag, 4



PLANNING, DESIGN,
CONSTRUCTION ADMINISTRATION
AND COMMISSIONING

OPERATIONAL PLANNING AND
TECHNOLOGY INTEGRATION



RESEARCH, DIAGNOSTIC
TESTING AND VALIDATION,
COUNTERMEASURE
DEVELOPMENT, DIAGNOSTIC
TRAINING FOR HIGH-
CONSEQUENCE LIVESTOCK
DISEASES

NZ Ministry for Primary
Industries
**National
Biocontainment
Laboratory**



RESEARCH LABORATORY

35,000 SF

\$60 MILLION

BSL-2, 3, 3E



PLANNING, DESIGN,
CONSTRUCTION ADMINISTRATION
AND COMMISSIONING



DIAGNOSTIC TESTING,
SURVEILLANCE AND RESPONSE
PROGRAMS, IMPORT/EXPORT
TESTING, AND RESEARCH
PROGRAMS

Purdue University Animal Sciences and the Experiential Learning Complex



RESEARCH LABORATORY

125,000 SF

\$60 MILLION



PLANNING, DESIGN, AND
CONSTRUCTION ADMINISTRATION

ARCHITECTURAL DESIGN AND
ELECTRICAL ENGINEERING FOR
THE ANIMAL STUDIES WING, AND
MECHANICAL AND PLUMBING
ENGINEERING FOR ENTIRE
FACILITY



6,800 SF ARENA FOR CLASSES
AND SHOW EVENTS,
LARGE-ANIMAL HOLDING,
ABATTOIR, MEAT CUTTING
CLASSROOMS, SAMPLE LABS,
SMOKEHOUSE AND PACKAGING
SUITE, RESEARCH KITCHEN,
AND PUBLIC RETAIL SHOP



Taiwan National Defense Medical School Institute of Preventive Medicine



RESEARCH LABORATORY

40,000 SF

BSL-2, 3, 4



LABORATORY PLANNING AND
FUNCTIONAL PROGRAMMING FOR
THE CONTAINMENT SPACES
INCLUDING ARCHITECTURE AND
ENGINEERING PRE-DESIGN,
SCHEMATIC DESIGN AND DESIGN
REVIEW FOR SUBSEQUENT
DESIGN STAGES



DETECTION, INFECTIOUS
ANIMAL MODEL, BIOLOGICAL
PROTECTION SUPPORT, AND
VACCINE, ANTIBODY
PRODUCTION ASSESSMENT

Colorado State University Center for Vector-Borne and Infectious Disease



RESEARCH LABORATORY

38,000 SF

\$18 MILLION

BSL-2, Insectory



PLANNING, DESIGN, AND
CONSTRUCTION ADMINISTRATION

USGBC V4.0 AND DESIGNED TO
LEED SILVER



ARTHROPOD-BORNE AND
INFECTIOUS DISEASE
RESEARCH

US Department of Agriculture Southeast Poultry Research Laboratory



RESEARCH LABORATORY

235,000 SF

\$140 MILLION

BSL-2, 3, 3E, 3AG, ABLS-2, 3



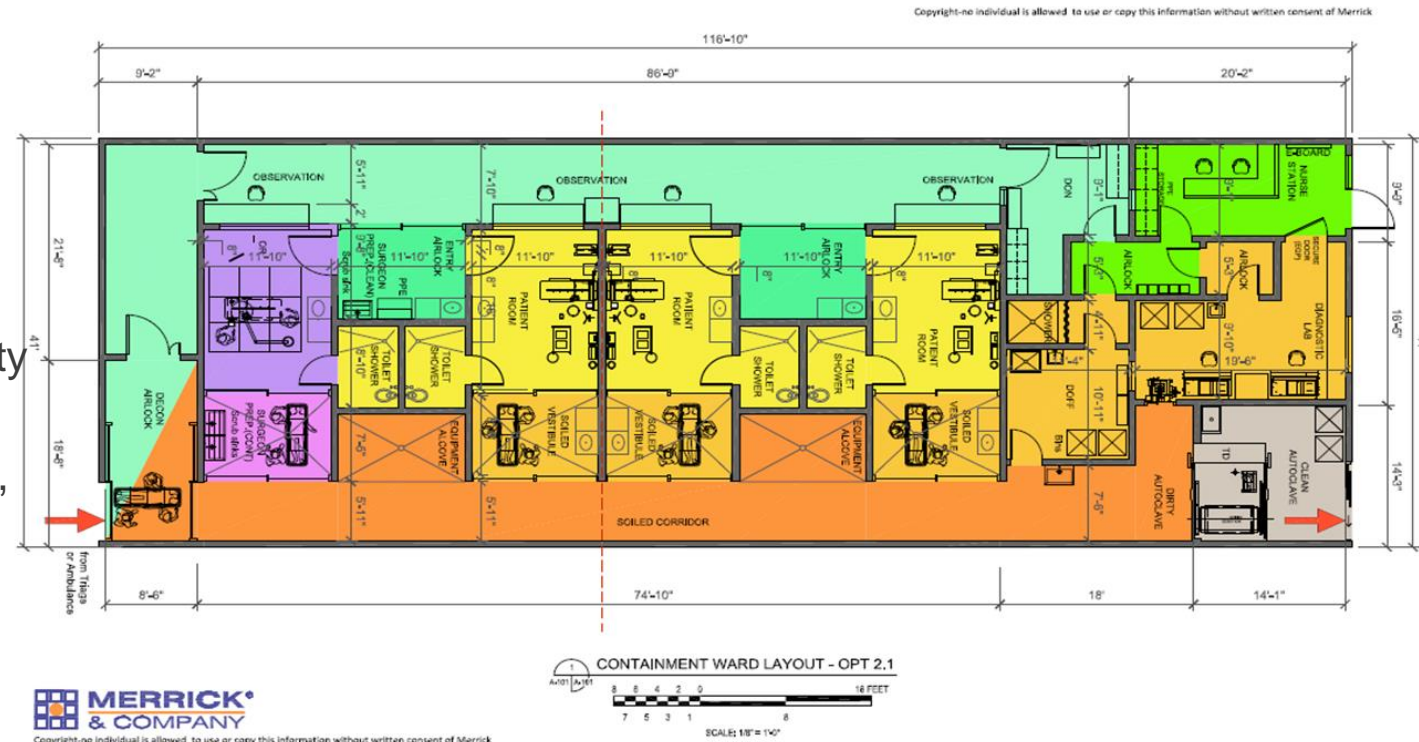
PROGRAM OF REQUIREMENTS,
PLANNING, CONCEPTUAL DESIGN,
CONSTRUCTION ADMINISTRATION
AND COMMISSIONING

OPERATIONAL PLANNING AND
TRANSITION PLANNING



RESEARCH TO PROVIDE
SCIENTIFIC SOLUTIONS TO
NATIONAL AND INTERNATIONAL
EXOTIC, EMERGING AND
ENDEMIC POULTRY DISEASES

- Designed with biosafety, biosecurity and biocontainment
- Defined by CDC, NIH and WHO
- Scalable designs to fit within an existing hospital or a new hospital to accommodate single, or multiple bed capacity, inclusive of dedicated diagnostic laboratories
- Healthcare worker, patient and environment safety and PPE management
- Technical designs that demonstrate zones of risk, protecting patients, the environment and the health care staff
- Decontamination systems for rooms, PPE, organics and liquid wastes



GORGAS INSTITUTE OF HEALTH STUDIES **PRIMARY PUBLIC HEALTH MANAGEMENT**

