Laboratories + R&D

SCIENCE & TECHNOLOGY

Kirksey
ARCHITECTURE

We're Kirksey Labs.

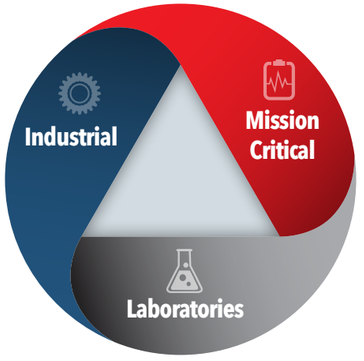
Kirksey's Science & Technology Team consistently delivers efficient, high-quality facilities with a focus on customer service, great design, and high-performing buildings. Our laboratory practice is focused on both private enterprise and institutional/higher-education clients. Kirksey has garnered a reputation for being a leading laboratory design firm, serving the energy, oil & gas, and chemical markets with extensive experience in chemical, petrochemical, and material sciences lab facilities. The diverse nature of Kirksey's lab design experience allows our team to respond to the users' needs, spanning the spectrum of life sciences, research & development, education, and production support. Let Kirksey's laboratory architects help you plan and design your next state-of-the-art facility.

Kirksey
ARCHITECTURE

ARCHITECTURE / INTERIOR DESIGN / MASTER PLANNING / ECOSERVICES

Commercial. Community. Collegiate. pK-12. Government. Healthcare. Hospitality. Religious. Renovation. Residential. **Science & Technology.**

Kirksey
Science & Technology Team



Kirksey's Science & Technology Team was formally created in 2007 to address the growing demands of three specific markets: Mission Critical, Laboratory and Research & Development, and Industrial & Special Projects. These facilities often require robust coordination efforts across all engineering disciplines. Our team provides innovative solutions, complementing the complexities of each discipline, and simplifying the design and construction process. We value our clients' business goals and functional requirements and develop need-based solutions for complex projects. **We are committed to understanding and enhancing the science and technology that drives our clients' success.**

LAB PROJECT TYPES

- Generic Wet Chemistry
- Generic Biology & Life Science
- Generic Computational
- General Materials Science
- General Characterization
- Specialized Characterization and Imaging (SEM, TEM, NMR, Faraday cage protected, etc.)
- General Nanotechnology
- Specialized Nanotechnology
- General Analytical (GC, MS, etc)
- GeoChemistry Lab
- GeoMechanical Lab
- Pyrolysis Laboratory
- Rock/Plug Preparation and Analysis
- Rock Mechanics
- Core Analysis Lab
- Molecular Spectroscopy
- Dedicated NMR
- CatScan/MRI suite
- Dedicated Process Chemistry
- Dedicated Organic Chemistry
- Dedicated Organic Elementals Lab
- Solids Characterization
- Atomic Spectroscopy
- X-Ray Fluorescence
- Exploration & Production Support (heavy crudes)
- Enhanced Oil Recovery (EOR)
- Unconventional Petroleum
- Liquid Separation
- Petroleum Cement Lab
- H2S Lab
- High Toxicity Lab
- Caustic Study Lab
- Corrosion Lab
- Radiation Lab
- Fluid Dynamics & Flow Assurance
- Rheology Laboratory
- General Fluids Study
- Wax Lab
- Tissue Culture Labs
- Genetic Research
- General Bioscience & Life Science
- Catalyst research and production
- Higher Olefin Research and Commercialization
- Lower Olefin Research and Commercialization
- Float Column Research Space
- Microscope Rooms
- Flow Loop Laboratory
- High Bay / Crane-Served Research
- Pilot Plant / Specialized Refinery Support Operations
- BSL 2 and BSL 3 facilities
- GMO containment
- Vivarium & Animal support

LAB + R&D PROJECTS

University of Houston-Downtown,
College of Sciences & Technology Building

Stephen F. Austin University,
Ed & Gwen Cole STEM Building

West Texas A&M University,
Agriculture Sciences Complex

Texas A&M University, Wildlife,
Fisheries & Ecological Sciences Building

Blinn College RELLIS Campus, STEM Building

Lone Star College – University Park,
Center for Science & Innovation

University of Texas Health Science Center,
South Texas Research Facility

Texas Facilities Commission
& Texas Department of Public Safety

Dow Texas Innovation Center

Shell Technology Center Americas – Houston

Baylor College of Medicine,
National Space Biomedical Research Institute

Bellicum Pharmaceuticals

Huntsman Chemical Company

Florida Chemical Renovation and Expansion

DuPont New Laboratory Facility

Baker Oil Tools Laboratory

Baker Petrolite

Baker Performance Chemicals, Inc.

Texas Nuclear

Howard Hughes Medical Institute,
Janelia Farms Research Campus

Environmental Protection Agency (laboratory)

Rigaku/USA, Inc.

Boeing Aerospace, FEPC

Fesco Laboratories

Genosys Biotechnologies, Inc.

Lexicon Genetics Inc.

NASA Avionics Subsystems Integration Laboratory (ASIL)

Houston Community College,
Learning Hub and Science Building

Texas Woman's University, Institute of Health Sciences

Texas Tech University Health Science Center,
LARC Vivarium

Texas Tech University, Terry Fuller Petroleum Engineering
& Research Building

Texas Tech University, Research & Technology Building I

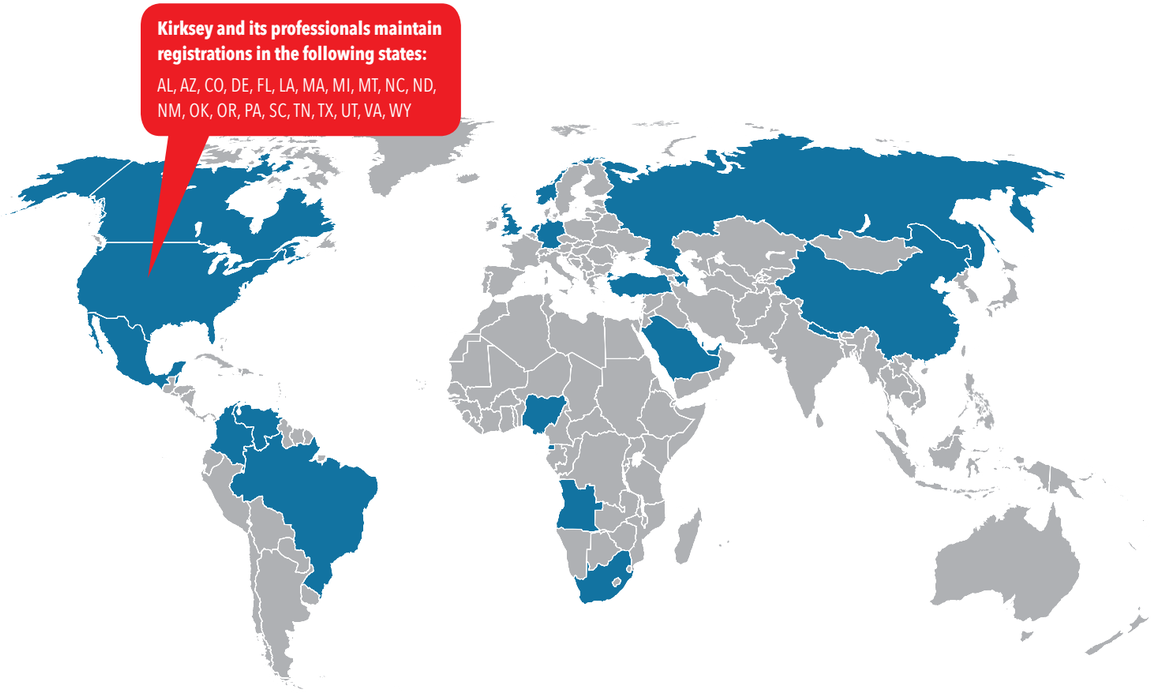
Pathfinder Energy Services

Schlumberger Dyna-Drill Motor Center of Excellence

Clariant Oil & Mining Laboratory

PCCA Manufacturing (Pharmaceutical Compounding)

We're global.



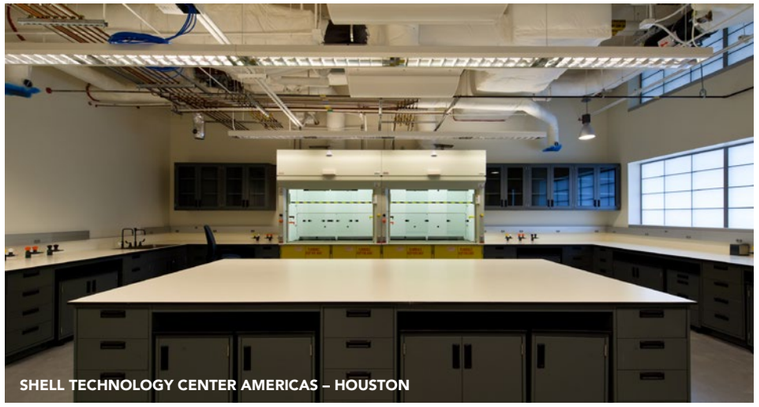
Kirksey has completed projects in **25 countries:**

Angola, Azerbaijan, Belize, Brazil, Canada, China, Columbia, England, Equatorial Guinea, Germany, Mexico, Nigeria, Nepal, The Netherlands, Norway, Qatar, Russia, Saudi Arabia, Scotland, South Africa, Sudan, Trinidad, Turkey, United Arab Emirates, United States and Venezuela.

We design world-class facilities.

THE DOW CHEMICAL COMPANY TEXAS INNOVATION CENTER

The foundation of Kirksey's lab design process is a thorough **understanding of the science applications** that the labs are built to support. After careful consideration of safety, personnel, and equipment requirements, Kirksey's innovative planning process results in a fit-for-purpose, flexible lab solution.



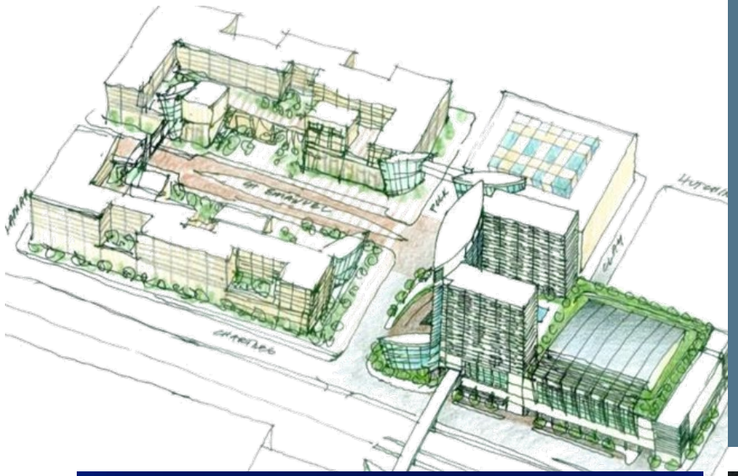
SHELL TECHNOLOGY CENTER AMERICAS – HOUSTON

TEXAS TECH UNIVERSITY INNOVATION HUB

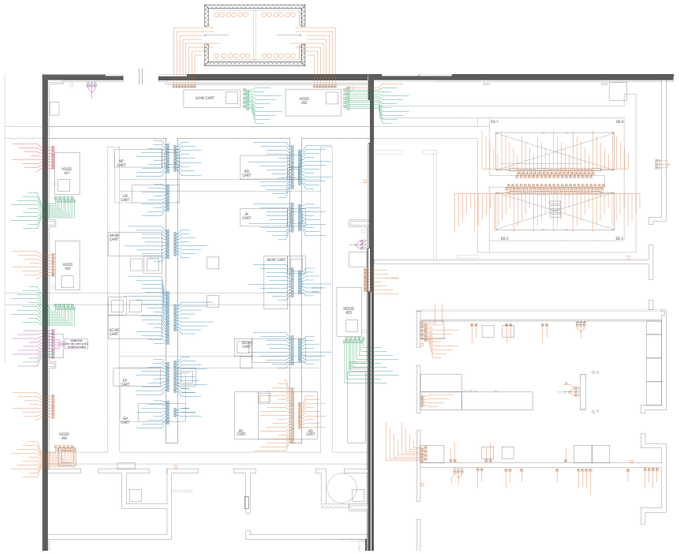
Our lab facilities are utilized by both the private sector and institutional clients, including higher education organizations. Our **full-spectrum experience** supports our classroom-to-workplace approach, benefiting the design of both lab types.

R&D Campuses

Kirksey's lab projects are often part of larger campus settings that include a number of amenities and R&D components needed to **attract and retain today's top workforce.** Innovative R&D campuses often include office space, conference and visitor centers, fitness centers, cafeteria and dining facilities, health and wellness centers, clinics, warehouses and central plants, and well-planned infrastructure.



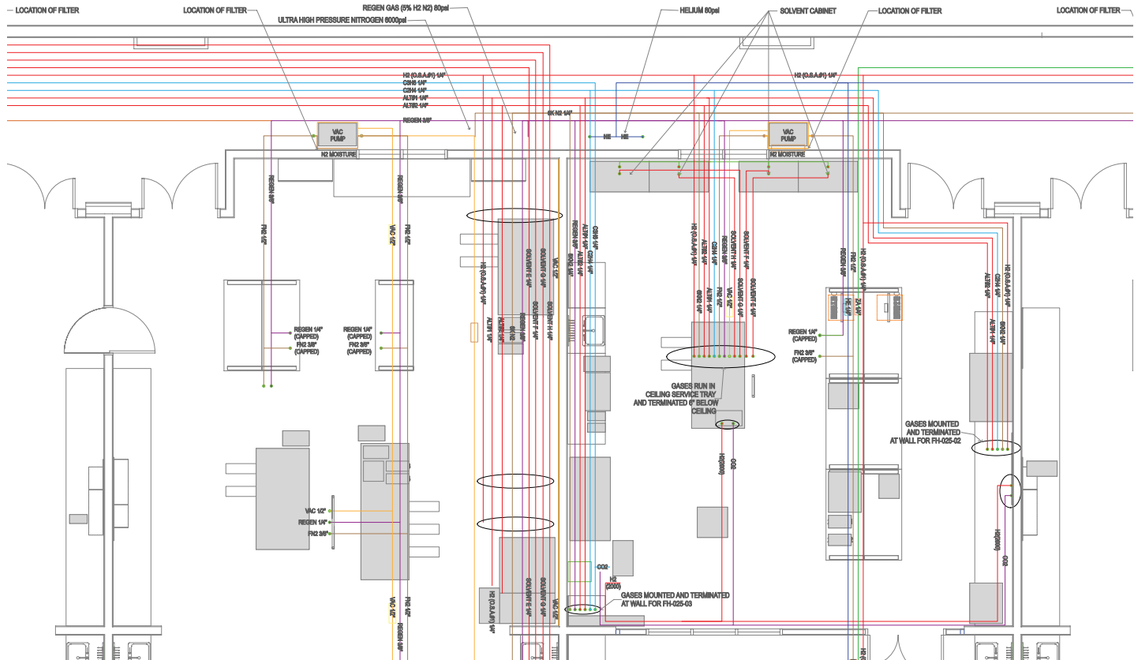
Kirksey's diverse market sector experience allows us to fully address the needs of any campus project. When designing a laboratory campus, the Science & Technology team draws on the experience and expertise of our commercial, hospitality, renovation, healthcare, and corporate interiors teams. Project teams are created based on the needs of the client and include specific personnel to address individual project needs.

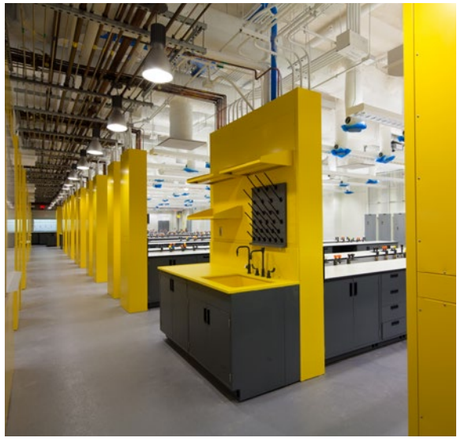


We design for the scientific process.

We understand the importance of designing facilities that enhance the efficiency of the scientific process. Through close collaboration with facility managers, lab users, and other client representatives, our team is able to deliver design solutions that foster safety, efficiency, durability and an environment that supports innovation and functionality.

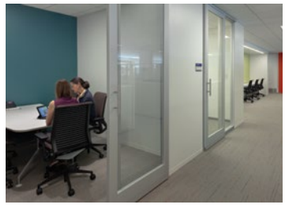
KIRKSEY LAB GAS AND EQUIPMENT DRAWINGS

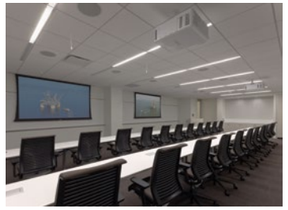


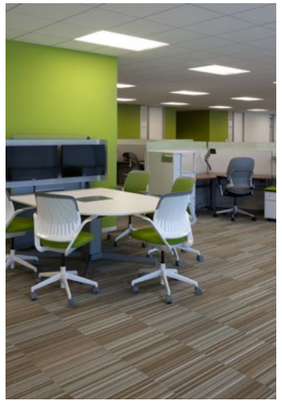


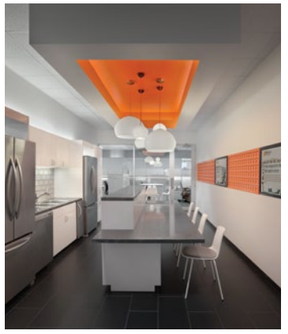
We plan custom support spaces.

Lab facilities often require a variety of spaces to support primary operations. Kirksey has designed support spaces such as: **break areas, locker rooms, central control rooms, server rooms, lobbies, meeting rooms and conferencing centers, warehouse and high-pile storage, equipment rooms, hazardous material storage, and research offices.**

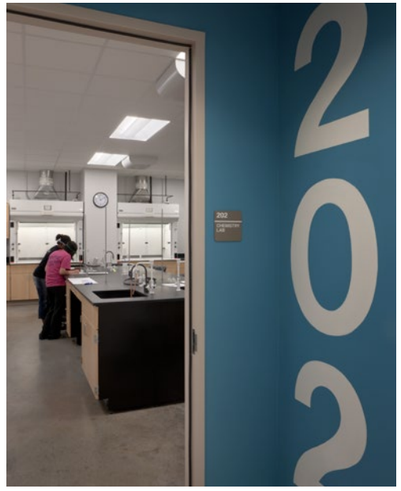


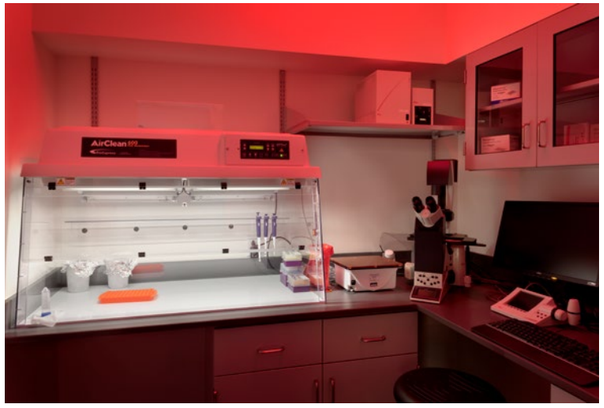


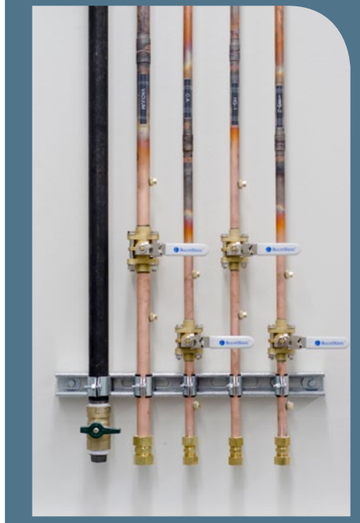




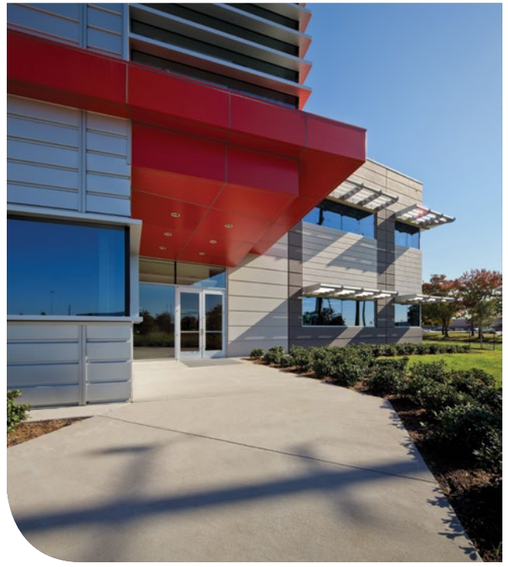
There are hundreds of support functions that can be included in larger lab projects, and our goal is to seamlessly integrate each one into an efficient architectural solution. Successful integration requires coordination and a comprehensive understanding of project requirements and goals.







Kirksey works with lab users to develop specific details that will enhance the functionality of the space. Our designs also consider the durability and **"operational ease"** of maintaining the lab components and infrastructure.

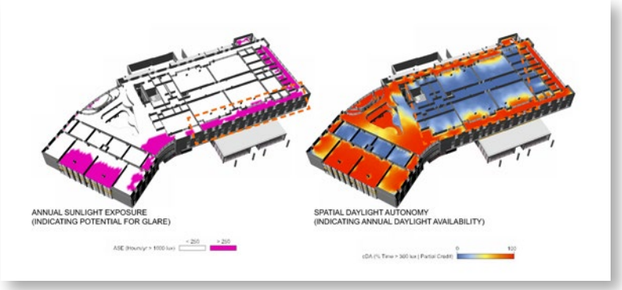


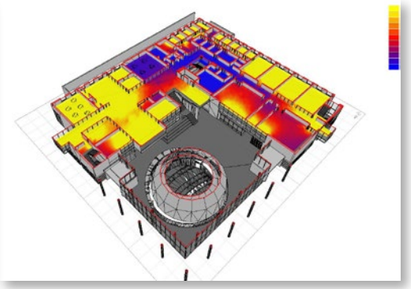
Energy-efficient design

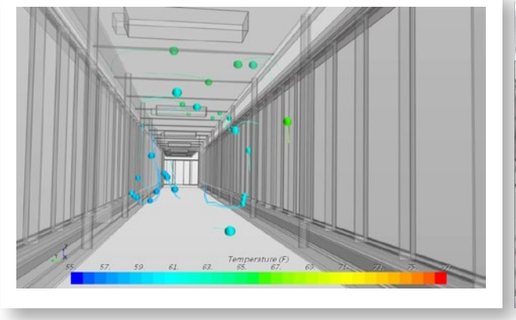
Laboratories are specialized facilities with intense energy requirements. Kirksey has advanced technical expertise in building simulation to optimize your facility. Our in-house analysts evaluate our designs with many types of studies including:

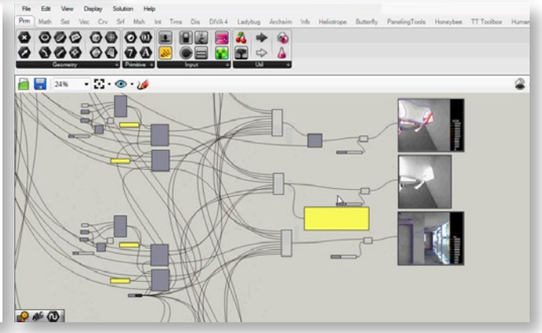
- Energy modeling to optimize performance and compare lifecycle costs
- Daylight modeling to ensure balance of effective daylight and efficient envelope design
- Computation fluid dynamics to understand ventilation
- Hygrothermic modeling to understand heat and moisture in envelopes
- Water balance analysis of water sources and demands
- Acoustical simulation

With over 33 million square feet of LEED certified projects to our credit, the Kirksey team has the expertise to create a high design and high performance laboratory building.









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