



UNIVERSITY OF
OREGON

RFQ - Pacific Hall Basement
and First Floor Laboratories

Proposal for Design Services

Dangermond Keane Architecture
+ Design for Science

21 October 2015

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Mr. Fred Tepfer
Campus Planning, Design & Construction
1295 Franklin Boulevard
1276 University of Oregon
Eugene, Oregon 97403-1276

Re: RFQ - Pacific Hall Basement and First Floor Laboratories

Dear Mr. Tepfer,

Dangermond Keane Architecture is pleased to submit this proposal for the Pacific Hall Laboratories project. Though we have not worked with University of Oregon before, we believe we are a great fit for the University and for this project. After reviewing our qualifications and discussing our work with our references, we trust that you will agree.

Chris Keane and I founded Dangermond Keane Architecture in 2007 with the goal of creating a small design focused office that provided an exceptional level of service for our clients. Our portfolio includes laboratories and university buildings, aquariums and exhibits, tenant improvement projects, private residences, multi-family housing and university and facilities master plans. We have designed and executed projects for some of the most prestigious institutions and universities across the country, including Lewis and Clark College, the University of California, Gallaudet University, the Oregon Zoo/Metro, the National Science Foundation, the Department of Energy, the Birch Aquarium at Scripps, the Aquarium of the Pacific, and the Lawrence Berkeley National Laboratory.

As our small practice has grown over the years, we have been looking for opportunities to work with the University of Oregon. We believe the Pacific Hall project is the perfect project for us to establish a working relationship and to demonstrate our design excellence and collaborative spirit.

The principals at Dangermond Keane have a direct hand in the design and construction of all of our work. With years of experience providing design services tailored to the specific needs of a wide variety of institutional clients, we are proud that our references will confirm our diligence and integrated team approach. The fact that we have worked on multiple projects for nearly all of our clients is a testament to our record of client satisfaction. These projects and client relationships have given us experience and expertise that applies directly to the work that is outlined in your RFQ.

We understand that the University expects to be involved in the selection of the consultant team and as such have only identified one consultant within this proposal. We have teamed up with Glen Berry of Design for Science, a highly qualified lab planner and frequent collaborator. Glen's firm brings extensive and valuable expertise as well as a spirit of collaboration throughout all phases. We trust you will see the value of our collaboration in the qualifications to follow.

We are excited to have an opportunity to share our credentials with University of Oregon. We look forward to discussing your project further with you and to answering any questions you may have about our proposal.

Sincerely,

Dangermond Keane Architecture, LLC

A handwritten signature in black ink, appearing to read "Steve Dangermond", written over a light gray circular stamp.

Steve Dangermond
Principal

Meeting the Design Challenge

The team of Dangermond Keane and Design for Science is adept at designing collaborative research environments that are both affordable and flexible. Drawing upon our experience working with a wide variety of university clients, our design process is rigorous and strategic and focused on balanced decision making and the thoughtful use of resources. Our ultimate goal is to design spaces that enhance both the research and the lives of the researchers. We study the culture of our clients to look for ways to strengthen individual and departmental connections and to customize the work environment in support of the research.

We know that laboratories used for scientific research continue to evolve and change as technology and research missions change. The proliferation of computer based research procedures has caused many labs to look more like computer work rooms than wet labs. The need for plumbing services has decreased somewhat, while the need for data and power has increased. The volume of chemicals used in today's research is significantly less than in the past, but the need for fume hoods and other exhaust devices is still real and necessary.

We know that a research environment that can adapt quickly to changes will provide the best value for the construction dollar spent. That said, the most flexible lab is not necessarily the most expensive. For example, sometimes flexibility is enhanced by providing less casework, fewer fume hoods, less sinks. Providing the proper ratio and density of built-in equipment is critical to the success of a flexible and adaptable lab environment. Less can be, and often is, more in the scientific realm of laboratory design.

We seek to create a pattern language that acknowledges a repetitive and deliberate distribution of plumbing, power, and data services throughout the lab environment. The ability to shut down a lab zone without affecting adjacent lab areas is an important consideration in the deployment of shut off valves, conduit pathways, cable tray access, and exhaust and supply air ductwork distribution. Allowing for a "kit-of-parts" in each of the building systems will provide the most flexibility over the life of the building.

Simplicity of form, pattern, and distribution often makes lab spaces more user friendly and it allows the occupant to customize individual lab areas to meet the current needs of technology, equipment, and instrumentation. It can address the reality of change - change in personnel, change in technology, and change in research missions, all of which will happen many times over during the life of the building.

Finally, sustainable design in laboratory buildings can be a challenge but we believe it is critical both from a cost and stewardship standpoint. Lab buildings consume significantly higher amounts of energy than other building types. One strategy that has been used at the Center for Global Ecology in Stanford, California is to rethink and redefine the laboratory environment. Recognizing that much of the lab environment is for computational and/or equipment use, the need for chemical work areas can be reduced, and thereby reduce the need for 100% exhaust labs. The inclusion of "workspace" environment in the lab building, with recirculated air and/or natural ventilation for computational and equipment needs can significantly reduce the carbon footprint of a lab building and contribute to a sustainable design model.

Our team has a wealth of experience designing university laboratory spaces. We take a wholistic approach to design that balances cost, aesthetics, long term flexibility and a sensitivity to the culture of the users. We are excited about the possibility of working with the staff and scientists at the University of Oregon on this project and believe we are well suited to help the University meet its goals.

Design Team

Dangermond Keane Architecture was founded on the premise that a small but expert firm can produce outstanding design and provide highly personal service to local and national clients, on projects of any scale. Our office is built around a studio culture that encourages research, exploration and collaboration. Our design process is iterative and research based, and relies on a highly collaborative relationship with our clients and consultants. We are LEED accredited designers and deeply committed to designing beautiful, sustainable, high-performance buildings that enhance the lives of their users. Not driven by a particular style, we believe instead that good design is the direct product of artful problem solving.

Design for Science is a laboratory design consulting firm, specializing in the programming, planning and design of laboratory science buildings for colleges, universities, private industry and government. Design for Science offers laboratory design consulting services to architects and brings the project experience of a wide variety of college, university, and corporate science building projects to each team. We assist the architect in all aspects of science building design. Over fifteen years we have worked on over ninety laboratory projects with 120 architect and owner clients.

Adaptive Re-use

We have designed a number of adaptive re-use projects that re-program or completely reimagine existing buildings. These projects include:

- *The Olin Chemistry Lab at Lewis and Clark College*
- *The Career Center at Lewis and Clark College*
- *The Long Baseline Neutrino Facility at Sanford Lab*
- *The Center for Science Education at Sanford Lab*
- *AltaSea Marine Research Lab at Berth 57 at the Port of LA*
- *The Scripps Earth Exploration Center at the Birch Aquarium*
- *Fay and Ballard House Residence Halls at Gallaudet University*



The scale of these projects range from a small chemistry lab renovation in an existing campus building at Lewis and Clark college, to a major marine research facility located in a historic pier building at the Port of LA, to a major addition and renovation at the Birch Aquarium in La Jolla. Though the scales vary widely, many of the concerns with these projects can be remarkably similar. Working on existing buildings requires a careful analysis of existing conditions particularly with regards to structural, MEP and code considerations. It is not uncommon for complexities to arise in adaptive re-use/renovation projects if this early assessment is not done carefully.

Another concern has to do with sequence and constructability. More often than not, some part of the building will need to remain open and functional during the construction process. It is critical that the design process take this in to account and that the final design can be executed within the established parameters of academic calendars, service requirements and noise and vibration tolerances.

The mechanical systems are typically a critical piece of both the cost and design puzzle when building new laboratories in existing buildings since the original systems were often designed for very different loads. Whenever we work on an existing building we look for ways to leverage the money spent to make the biggest impact on the overall work life of the users, the building and campus beyond.

21st Century Laboratories

As traditional boundaries between scientific disciplines blur, clients are looking for ways to enhance their interdisciplinary research environments through the design of their facilities. Accordingly, as architects we seek how best to foster a sense of collaboration among departments and researchers. We work closely with faculty and administrators to design buildings that inspire creativity and make positive contributions to the acts of teaching and learning.

Some of the planning notions we carry out in our designs include:

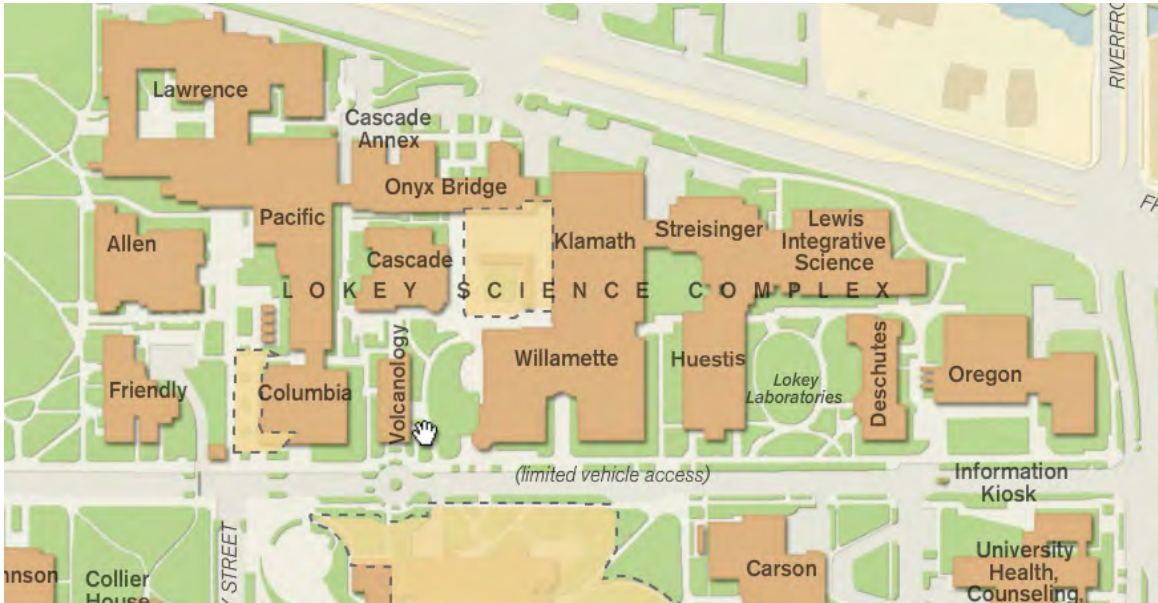
- *separating principal researchers' offices from labs in order to draw people into spaces where they may cross paths;*
- *clustering lab support functions to encourage communal use;*
- *planning places for casual interaction;*
- *positioning different types of labs near one another in research "neighborhoods," rather than segregating research spaces by classification;*
- *equipping corridor alcoves with white boards for informal "chalk talks";*
- *designing generous and convenient stairs to add the vitality of peoples' comings and goings to lobby spaces; and*
- *situating lounge spaces near high traffic areas like the main entry, lobby, and stairs to animate the building and give it a sense of place.*

In order to provide flexibility over time the lab spaces should be designed to allow for easy expansion and contraction of individual lab sizes, while also encouraging and supporting the collaborative environment. To achieve this, a modular layout should be used that is easily adaptive to different needs, and is efficient in the use of space.

The Pacific Hall project presents an opportunity to go beyond simply meeting the stated program and create an environment more conducive to interaction and collaboration. Beyond that, the design should enrich the lives of its users and improve their sense of well being. Fresh air and natural light should be provided generously whenever the program allows. Our work for the Carnegie Global Ecology Center achieves these goals with a very efficient and open floor plan that is flooded with daylight. The labs there are bright and flexible and the support spaces glazed wherever possible to allow visual connection.



Because Pacific Hall is part of the larger Lokey Complex, it is important to design with the larger campus in mind. Wherever possible, connections to campus pathways and neighboring buildings should be strengthened and opportunities to engage the broader campus should be exploited. We will look for ways through the architecture and the use of technology to connect the building and its users to the campus community beyond.



Our team has designed labs in new buildings and in the renovation of existing buildings. These projects include:

Dangermond Keane Architecture

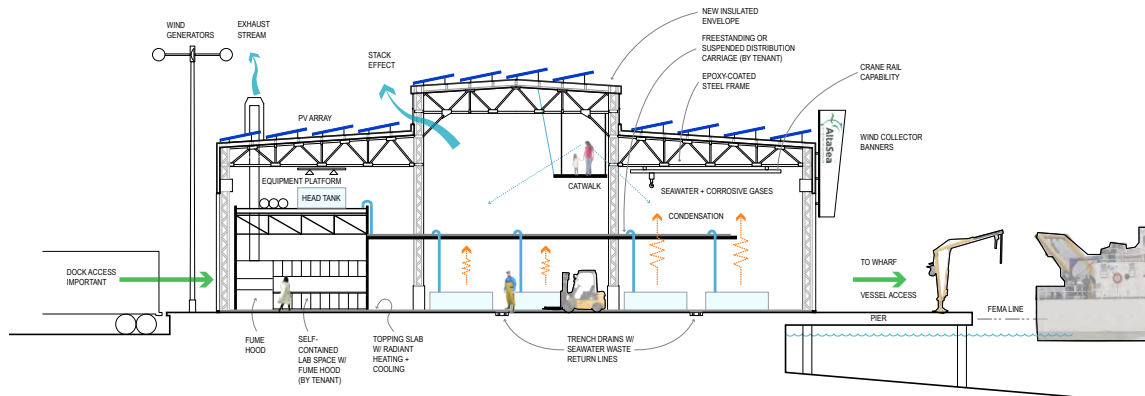
- *The Olin Chemistry Lab at Lewis and Clark College*
- *The Long Baseline Neutrino Facility at Sanford Lab*
- *AltaSea Marine Research Lab at Berth 57 at the Port of Los Angeles*
- *The Gloucester Marine Innovation Center in Gloucester, Massachusetts*
- *The Carnegie Global Ecology Center at Stanford University*
- *The Kavli Institute for Particle Astrophysics and Cosmology at SLAC*
- *The Gulf of Maine Research Laboratory*
- *The Sprague Hall Biomedical Research Laboratory at UC Irvine*
- *The San Diego Supercomputer Center at UC San Diego*

Design for Science

- *Olin Hall Lab Renovation at Harvey Mudd College*
- *Muir Biology Building Lab Renovation at UC San Diego*
- *Keim Hall Renovation at the University of Nebraska*
- *Medical Education Teaching Center at UC Riverside*
- *Science Building Renovation at the College of Southern Nevada*
- *Rinker Health Science Buildings at Chapman University*
- *Mayer Hall Renovation and Addition at UC San Diego*
- *Applied Physics and Mathematics Building Renovation at UC San Diego*

Highly Sustainable Projects

Dangermond Keane is committed to integrated sustainable design. We are LEED accredited professionals, and are alumni of some of the leading sustainable design offices in the country. We approach all of our work with the assumption that it is our responsibility to design projects that have as low an environmental impact as possible, create healthy environments for their users and reduce operating costs by being energy and resource efficient. We have extensive experience with LEED and our AltaSea project is currently planned to be a Net-positive project. At the same time we recognize that many clients do not want to pursue a LEED rating, but still have strong sustainability and stewardship goals. We have been involved in a number of projects that have achieved high levels of sustainability but have chosen not to apply for LEED certification.



Our commitment to design excellence and low-impact, sustainable development can be seen in our design for the expansion of the Birch Aquarium at Scripps Institute of Oceanography, which incorporates extensive green roofs and an aesthetic drawn from the natural systems of the La Jolla bluffs and coastal habitat. The project seeks to restore and enhance protected habitat, extending the native coastal chaparral onto the building itself. Located in a neighborhood that is sensitive environmentally as well as politically, we are working closely with Campus Planning, the Coastal Commission, neighborhood groups, and the local fire department, and ensuring that the project fits within the Coastal and Campus Long Range Development Plans.



The Global Ecology Center at Stanford is an example of a highly sustainable, high-performance building built within limited budget parameters. Careful analysis of programmatic needs led to inexpensive solutions using open laboratories and extensive shared equipment spaces. Preference was given to “dumb” sustainable solutions like simple light shelves, as opposed to expensive, technological solutions, though the project does feature an innovative night-sky radiant cooling system that uses sprinklers to spray a thin film of water on the metal roof at night, then circulates that water through the structure of the building to absorb heat during the day.



For the Pacific Hall Laboratory project we will take an integrated approach to developing a design solution where diminishing returns emerge to balance sustainable design goals with the project’s budget. Three primary strategies will be used: energy-efficient design, appropriate allocation of resources, and indoor environmental quality.

Designing Within a Campus Framework

Our work often involves fitting into the fabric of a campus, taking into account factors such as site characteristics, building identity, pedestrian pathways and circulation routes, and proximity to important buildings. We have a broad experience working in academic and research settings as demonstrated by the fact that we have worked on projects at over a dozen university and research campuses. On these campuses our projects have negotiated a wide variety of site conditions. We have been involved not only in the localized site planning of a building and its immediate context, but also in helping shape campus design to a much broader degree as well. This ability to work within a larger academic context has been informed by our involvement in the master planning and long range development planning of a number of campuses. We assisted in the creation of the Berkeley Lab LRDP, the Sanford Lab LRDP, the UC Riverside LRDP, and the LRDP for UCSF. We were most recently involved in creating Gallaudet University 2022 Campus Plan. This broad perspective has given us a unique insight into the issues and requirements of academic campus site design.

Stakeholder Involvement

We are accustomed to a design process with a high degree of involvement from building users. Typically, we use a workshop process that alternates between large committee meetings involving all of the major stakeholders, with smaller workshops that flesh out the issues and requirements of the various constituent groups. The larger committee workshops focus on major decisions which need to be made by the entire group; it is here that competing demands of different groups can be evaluated.

Communication is very important to the overall process. Decisions generally move from very broad, general issues at the beginning to increasingly detailed decisions as the project moves along. Decisions build one upon another, so it is important that everyone be aware of what has been decided and the resulting implications. We are good designers because we are good listeners. This is the University's project, not the designer's project, and we will begin by listening to and absorbing the vision for the project as described by the University's stakeholders. The most important part of our approach therefore is clear and continuous communication between our team's project manager and the University's project team.

We recognize that staff, students and faculty have a wealth of expertise that will need to be translated efficiently by the Design Team into the design of the new space, and we are skilled negotiators and meeting facilitators. We recommend establishing a time for bi-weekly workshops, on-site if possible, in order to discuss issues, share information, and review and update the design as it evolves. The attendees of these meetings will include sub consultants but vary according to need. We see this approach as a way to maintain a practical schedule for the project and keep the project team up to date. These meetings may include focus sessions with key players in the project who will provide input to the design team. The goal is to use these workshops to build consensus and keep the design process transparent while avoiding backtracking due to lack of clear communication.

Throughout the design and documentation process, the Design Team will communicate ideas and information through sketches, 3-D renderings, models and diagrams. We will use whatever tools are appropriate to investigate ideas and clearly communicate them with the stakeholders. We will also maintain a rigorous approach to meeting minutes so that decisions and issues are recorded and the Design Team and the University are always moving forward together with the same assumptions.

Managing Project Schedules

Dangermond Keane has an excellent track record in schedule control. Our success is reliant upon keeping schedule related issues at the forefront of the design process, resolving key issues at the appropriate times, keeping changes to a minimum, and predicting where changes are likely to occur. Schedule control is a collaborative exercise that requires clear communication between all parties involved in the project and the experience required to anticipate potential issues that could create delays.

In our experience, the issues most likely to cause schedule delays tend to be regulatory, such as dealing with codes and permitting requirements unique to a renovation project, or cost related (Our approach to managing project costs is described in more detail in the Cost Estimating section). In order to avoid potential schedule disruptions, we begin each project with a discovery period in which we research all regulatory bodies that have jurisdiction over the project and do a preliminary code analysis based on the project type. Once the project begins to take shape, we do a more thorough code analysis and begin to meet with regulatory officials like the Fire Marshall in order to identify any potential areas of concern at the outset. Our experience with this method tells us that developing these relationships early in the process is the best way to avoid any surprises that can significantly impact the project schedule.

Cost Estimating

One of the most critical tools in managing a budget and achieving a high-quality work product is the cost estimate. We work closely with our cost consultant during all phases of the project beginning in the early phases, estimating conceptual design strategies. These early, high-level estimates help set expectations and are followed up by more detailed estimates at the end of Schematic Design. We include our cost consultants in meetings throughout the process and rely on their expertise to help guide the design process and keep the project on track.

Critical to the accuracy of the estimating, particularly early in the process, is anticipating those issues and items that have not yet been addressed in the drawings. We will often use narrative descriptions or performance specifications to help fill in the unknowns and create placeholders in our budgets and estimates.

We have good working relationships with a number of the best cost consultants in the business. Though we have not selected one at this point we will want to work with the University to select a cost consultant before the project starts.

Project Delivery

Dangermond Keane Architecture has experience with all of the major project delivery types. We have two projects nearing completion that were delivered using a CM/GC delivery method, the Coastal Discovery Center in Newport, Oregon, and the Sanford Homestake Visitor Center in Lead, South Dakota. We believe that this method can yield superior results depending on the experience and quality of the contractor's personnel during preconstruction. As previously stated, we strongly recommend that the Owner/Design Team should also work with an independent cost estimator and reconcile that estimates against the Contractor's estimates and GMP.

Key Personnel (complete resumes available upon request)

Executive Architect

Dangermond Keane Architecture LLC



Steve Dangermond, Architect - LEED AP
Principal-in-Charge, Project Manager

In Steve Dangermond's 30 years of practice, he has developed an expertise in the design of highly complex institutional buildings such as aquariums and laboratories. A LEED Accredited Professional, Steve is deeply interested in the performance of buildings, both socially and environmentally. Steve is currently overseeing construction of a Visitor Center and Education Center for the Sanford Underground Research Facility and Construction Documents for the OMSI Coastal Discovery Center.

On this project, Steve will be the Principal-in-Charge as well as the Project Manager. He will be the primary contact for the University and will oversee the consultant teams and their work products. He will attend all meetings and work closely with the University and the design team to manage the budget and schedule.



Christopher Keane, AIA, NCARB - OR License # 5400
Design Principal, Architect of Record

Christopher Keane is an accomplished architect with over 20 years of experience designing university projects, museums, aquariums, housing and laboratories. He has worked in some of the most progressive design firms in the country, including the offices of Machado & Silvetti and Associates and McDonough & Partners. In recent years, Chris was the design lead on the Birch Aquarium expansion, and has prepared the master plan and design guidelines for Gallaudet University, the University for the Deaf. He is now applying the knowledge gained in those studies to a number of sizable renovation projects on the Gallaudet campus. This experience has given him a unique understanding of designing for differing abilities and for the requirements of ADA. Chris will oversee the design effort for the Pacific Hall Laboratory Project.

Stephen Colin
Project Architect

Stephen's experience includes a wide range of project types including, retail, sports, master-planning, adaptive re-use, interiors, industrial, residential, and laboratories. His work across the country and internationally have not only involved a variety of project types but also scales. An expert in Building Information Modeling (BIM) Stephen has acted as the BIM director for multiple firms and has used his knowledge to leverage BIM to deliver successfully integrated projects realizing cost and schedule savings. Stephen will be responsible for the day to day development of the drawing set and will attend workshops and consultant meetings.

Laboratory Design

Design for Science



Glen Berry - Principal

Glen Berry is the founder and President of Design for Science. He will be responsible for all aspects of laboratory design for the Center for Ocean Health. He has worked exclusively in the planning and design of science buildings since 1986, including, with Steve Dangermond, the Global Ecology Lab for the Carnegie Institution for Science, the Molina Animal Care Center in Long Beach, the Gulf of Maine Laboratory in Portland Maine, and the Biomedical Sciences Building at UC Santa Cruz.

DKa and Design for Science

Dangermond Keane Architecture and Design for Science have collaborated on the following Projects:

- *AltaSea Marine Research Lab at Berth 57 at the Port of Los Angeles*
- *The Carnage Global Ecology Center at Stanford University*
- *The Gulf of Maine Research Laboratory*
- *The Molina Animal Care Center, Aquarium of the Pacific*
- *UC Santa Cruz Biomedical Laboratory*

DKa

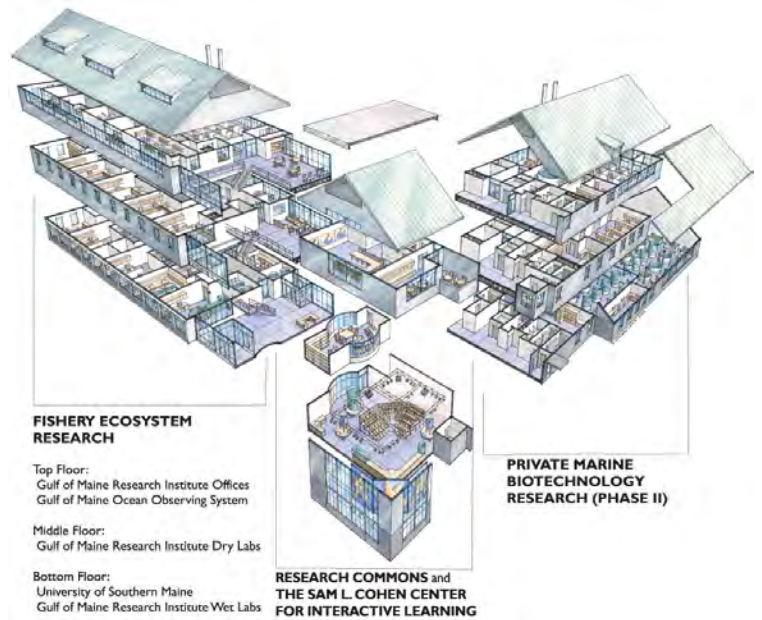
Gulf of Maine Research Laboratory

Portland, ME

\$11 Million Construction Cost
Completed 2004 - on Budget
55,000 gsf

Principal in Charge/Design Principal - Steve Dangermond
(Done as a Design Principal with EHDD Architecture)

The Gulf of Maine Research Laboratory is devoted to research on the Gulf of Maine Watershed and to educating the public about this precious resource. This project is part of a master-plan that includes additional lab space and an aquarium. The building was designed with industrial materials to fit in to the working waterfront of Portland Harbor, but it also faces on to Commercial Street giving the GMRI a civic presence. Scheduled to be constructed in an upcoming second phase, a flow-through seawater system was permitted as part of this project for use in the research labs.



Client Contacts: Alan Lishness, Chief Innovation Officer (Ret) - (207) 807-7099
Don Perkins, President - (207) 831-3627
Gulf of Maine Research Institute
350 Commercial St.
Portland ME 04101



MUIR BIOLOGY BUILDING LAB RENOVATION

University of California, San Diego

L.E.E.D. Silver

PROJECT

Muir Biology Building (originally built 1972)
3rd Floor Lab Renovation
University of California, San Diego
B Occupancy
Architect: RBB Architects, Inc.; Los Angeles, California
Lab Consultant: Design for Science- programming and
concept design

PROGRAM

Area: ~8,400 gsf; ~7,000 nsf
Program: Research laboratories for life science

BUDGET

~\$4 million construction budget

SCHEDULE

Complete design: 2013; Complete construction: 2014



DKa

Carnegie Institution for Science Department of Global Ecology

Stanford, CA

\$4 Million Construction Cost
10,000 gsf
Completed 2004 - on Budget

Principal in Charge - Steve Dangermond
(as a Design Principal with EHDD Architecture)
Project Designer - Christopher Keane

The award winning Global Ecology Center houses a new Department for the Carnegie Institute devoted to the understanding of the earth as an integrated system. Shared by forty-five interdisciplinary scientists, the building includes open laboratories and offices organized for maximum flexibility. The building forms a new courtyard that unifies the existing campus by creating a common gathering space that encourages interaction among the researchers. The design embodies the department's core goal of sustainable design in its construction and operation. Sustainable strategies include a "cool tower," as well as a chilled water system used to supply cooling through radiant floor slabs using an innovative "Night Sky" roof spray system. Concrete used contains 50% flyash replacement for cement, which reduces the carbon emissions associated with concrete production by one-third compared to a conventional laboratory.



Client Contacts: Dr. Chris Field, Director Department of Global Ecology - (650) 319-8024
Carnegie Institution for Science
260 Panama Street
Stanford CA 94305



KEIM HALL RENOVATION

University of Nebraska, Lincoln

PROJECT

Keim Hall Renovation
University of Nebraska, Lincoln
B Occupancy
Architect: Alley Poyner Machietto Architecture;
Omaha, Nebraska
Lab Consultant: Design for Science

PROGRAM

~60,000 gross square feet
~27,000 net square feet labs
Research labs for environmental science

BUDGET

~\$9.8 million construction budget

SCHEDULE

Complete design: 2009; Complete construction: 2011



DKa

AltaSea Berth 57

Port of Los Angeles, CA

Currently in Design

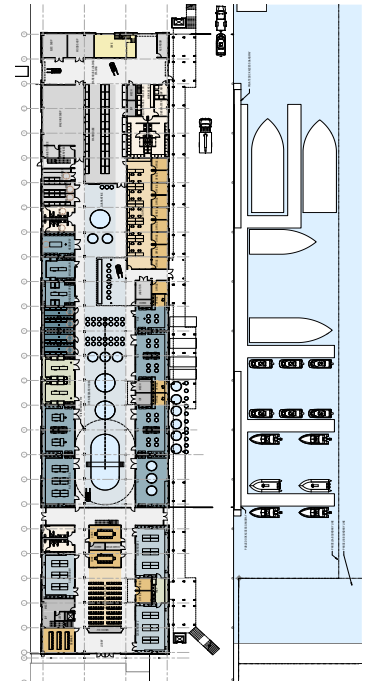
\$53 Million Construction Cost

Principal in Charge - Steve Dangermond

Design Principal - Christopher Keane

Project Manager - Stephen Coilin

The historic Berth 57 transit shed, one of the original buildings in the Port of Los Angeles, will be fully renovated and adapted for use as a marine research laboratory by this project, part of the larger AltaSea initiative we are designing with GenSLR Los Angeles. The 60,000 sf shed will be seismically reinforced and brought up to current codes, and preserved as much as possible while meeting the needs of the science it will house. DKA worked closely with the future tenants, the Southern California Marine Institute (SCMI)—a consortium of eleven universities—to define requirements and design the new laboratories. In addition to research labs, the project will house classrooms, office space, a machine shop, an electrical shop and a wood shop.



Client Contacts: Dan Pondella MA PHD, Director Southern California Marine Institute - (323) 259-2955
820 S. Seaside Avenue
Terminal Island CA 90731



SCIENCE BUILDING RENOVATION

College of Southern Nevada, Las Vegas, Nevada

PROJECT

Science Building Renovation
College of Southern Nevada
B Occupancy
Architect: Tate Snyder Kimsey Architects
Henderson, Nevada
Lab Consultant: Design for Science

PROGRAM

~26,000 gross square feet
~18,000 net square feet
Instructional laboratories for chemistry,
biology, physics, astronomy, geology,
and geography

BUDGET

~\$5 million construction budget

SCHEDULE

Complete design: 2011; Complete construction: 2012



DKa

Olin Advanced Chemistry Teaching Laboratory

Lewis and Clark College
Portland, OR
Completed 2015 - on Budget
\$350,000 Construction Cost
700 gsf

Principal in Charge - Steve Dangermond
Project Manager - Stephen Colin

For this renovation, outdated equipment was replaced with new high performance, enhanced containment, and energy efficient laboratory fume hoods. High efficiency LED lighting was added and casework and architectural finishes that are highly resistant to aggressive chemicals were used throughout. A new more efficient and flexible layout increased the lab's perceived size. The Lab's combination of improvements achieved the goals of significantly reducing overall energy consumption and providing a state of the art educational environment.

Client Contacts: Michel George, Associate Vice President for Facilities
(503) 768-7979

Gina Franzosa, Director of Project Management
(503) 768-7844
Lewis and Clark College
0615 SW Palatine Hill Road
Portland, OR 97219-7899



Sprague Hall Biomedical Research Laboratory

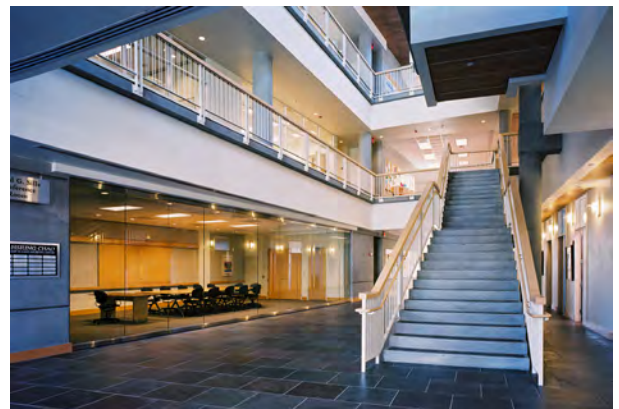
University of California at Irvine
Irvine, California

Completed 2003
\$20 Million Construction Cost - on Budget
83,000 gsf

Principal in Charge - Steve Dangermond
(as a Design Principal with EHDD Architecture)

This UC Irvine laboratory building, the winning scheme in a design-build competition, provides flexible biomedical research laboratories and support areas for research faculty and lab personnel. A central full-height atrium is open to all of the shared non-laboratory uses in the building, serving as the primary social space. Researcher's offices are located on the north side and feature views, natural ventilation, and extensive natural light. The entrance lobby and lounges, which relate to the landscaped plaza, create a beacon for the biomedical research campus at night. (Done as a Principal with EHDD Architecture)

Client Contacts: Rebekah Gladson, Campus Architect (Ret) - (949) 874-3426
5201 California Avenue, Suite 250
Irvine CA 92697-2450





APPLIED PHYSICS & MATHEMATICS BUILDING RENOVATION

University of California, San Diego

PROJECT

Applied Physics & Mathematics Building Renovation
B Occupancy
Type 2 Construction
Architect: RBB Architects, Inc.; Los Angeles, California
Lab Consultant: Design for Science

PROGRAM

~42,145 gross square feet
~33,000 net square feet
Research and Instructional classrooms and laboratories; Program includes lecture classrooms, faculty offices, and administrative offices. Science research labs include Biology, Linguistics, and Mathematics.

BUDGET

~\$7.5 million construction budget

SCHEDULE

Complete design: 2004; Complete construction: 2006

