



## Statement of Qualifications

### Life Sciences





**CAS Architects, Inc.** has been a part of the Silicon Valley since our founding in 1978. We are a 20 person firm, made up of licensed architects and interior designers. We provide comprehensive architectural services to meet the demanding and dynamic needs of our clients, whether for planning and designing corporate campuses, new building shells / build-to-suits, or tenant improvements / interior remodel.

### Adding Value Through Design

Beyond fulfilling programmatic demands, well-designed campuses and buildings help companies attract and retain valued employees and customers. CAS produces creative, well-considered designs that enhance the human experience with better environments for research, development, and creating and sharing of ideas. Our designs help articulate our client's values and contribute to establishing a strong, distinct corporate identity. CAS has successfully worked on various projects where there were multiple stakeholders. We understand how to orchestrate a project through a complex design, construction and approval process. It will be our task to participate in a leadership role to involve each of the stakeholders.

As a member of the US Green Building Council, CAS is dedicated to creating buildings that are environmentally responsible and strives to incorporate sustainable design principles into each project. We educate our clients so they can make informed choices on which renewable/recyclable materials and methods of construction will help to achieve efficiency and reduce operations and maintenance costs, so that the facility will be a high performance green building.

### Track Record for Total Quality

Through the process of designing complex technical facilities for many of the valley's leading businesses, CAS has found new ways to deliver through on-going staff education, design pin-ups, and intra-studio drawing reviews. Our firm carries this culture of total quality into every market and every project it serves. CAS embraces constant improvement and is committed to creating an environment in which people ask, "How can we do this better?" Among the results: satisfying, long-term working relationships and well-designed buildings that meet or exceed our client's expectations.





### CAS offers complete design services

- **Architectural Design**

- Master Planning
- Feasibility Studies
- Site Evaluation and Selection
- Site Development
- Programming
- Conceptual and Schematic Design
- Design Development
- Agency Approval Packages
- Public Hearing Representatives
- Code and Ordinance Compliance Evaluation
- Building and Fire Codes, HazMat ordinances
- Value Engineering
- Cost Estimating
- As-Built Field Verification
- Facilities Database Development
- Equipment Layout and Utilities Matrix
- Specialized Materials and Systems Research and Selection
- 3D Modeling and Animation
- ADA Disabled Access Compliance Evaluation

- **Space Planning and Interior Design**

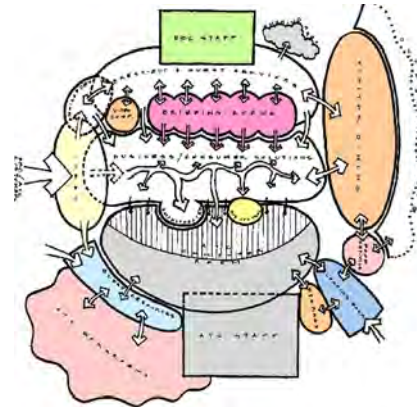
- Tenant Improvement Design
- Programming and Planning Growth
- Finish and Materials Selection and Specification
- Furnishings Selection and Specification
- Artwork Coordination
- Signage Programs
- Custom Millwork Design
- Custom Furniture Design

- **Bidding and Contract Documents**

- Contract Drawings
- Specifications
- Bidding and Award Documents

- **Construction Administration**

- Agency Approvals and Permitting
- Contractor Submittal Review



*Bubble diagrams define interrelationships during programming phase.*

- On-Site Meetings
- Project Close-Out
- Record Drawings
- Post Occupancy Evaluation

- **Special Services**

- Acoustics and Vibration
- Archeological Evaluation
- Audio Visual Design
- Central Plant and Energy Management
- Chemical Storage and Distribution
- Code Evaluation
- Energy Compliance
- Environmental Clearance
- FDA Validation
- Food Services
- GMP Consulting
- Graphics and Signage
- LEED Certification
- Hazardous Materials
- Manufacturing Equipment Hook-Up
- Process Equipment Layout
- Rezoning Applications
- Waste Treatment





### CAS can assemble an experienced full service team:

- **Land Design and Engineering**

Urban Design and Land-Use

Landscape Architect

Civil

Structural

Mechanical

Electrical

Plumbing and Process Piping

Fire Protection

### CAS can design any of these types of facilities:

- **Technical and Industrial Buildings**

Semi-conductor R & D and Manufacturing Facilities

Bioscience-Pharmaceutical R & D

Hazardous Material Storage and Distribution Buildings

Data Centers

Medical Device Manufacturing/Assembly



Canon USA, Inc.

- **Corporate Operations**

Administrative Offices

Sales and Marketing Suites

Executive Suites

Audio Visual, Video and Teleconferencing Facilities

Training and Demonstration Facilities

Corporate Cafeterias, Employee Lounges, and Break Rooms

- **Commercial**

Restaurants

Retail Establishments

Financial Institutions

Urban Revitalization

- **Recreational Facilities**

Amphitheaters

Exercise Rooms

Fitness Centers

Games Courts

Parcourses

Locker and Shower Rooms



Synaptics





### **José Cotto, AIA**

José is the catalyst for an ongoing commitment to design excellence at CAS. In his role as President & Design Principal, José takes the leadership role in defining the company's design direction. He is instrumental in integrating advanced technology, such as the Internet, 3D rendering and animation, with the CAS design process. His clients include high tech, biotech and internet support technology companies.

Education: Bachelor of Architecture, Syracuse University, Syracuse, New York

Registration: California  
National Council of Architectural Registration (NCARB)  
Member of ISPE

### **Gary J. Aquilina, AIA**

Gary joined the CAS team in 2006, bringing with him more than 20 years experience as an architect and project manager for many of the largest life science companies in the Bay Area. As Principal, Gary utilizes his strength in understanding the clients' needs and translating that into a finished design.

Education: Bachelor of Architecture, University of Oregon

Registration: California, Arizona, Utah, Washington  
National Council of Architectural Registration (NCARB)  
Member of ISPE

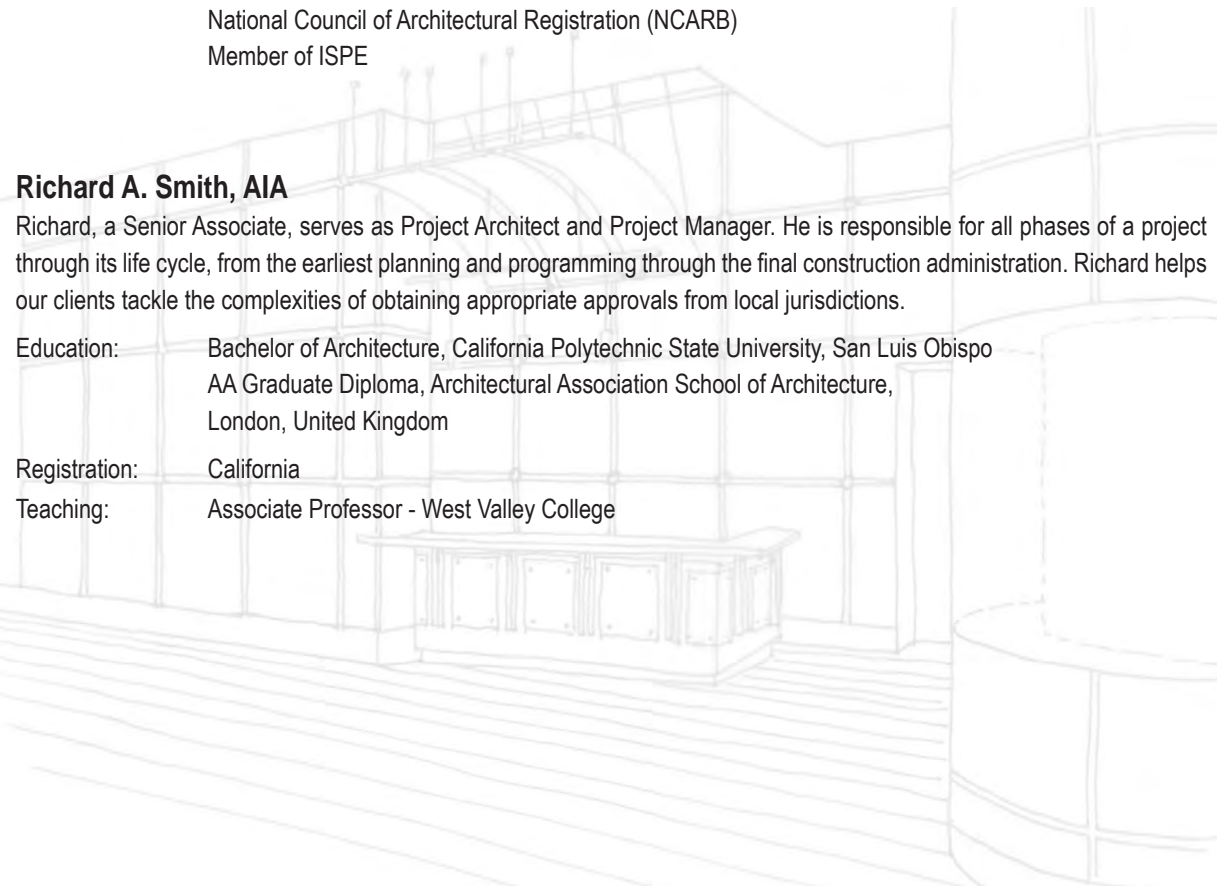
### **Richard A. Smith, AIA**

Richard, a Senior Associate, serves as Project Architect and Project Manager. He is responsible for all phases of a project through its life cycle, from the earliest planning and programming through the final construction administration. Richard helps our clients tackle the complexities of obtaining appropriate approvals from local jurisdictions.

Education: Bachelor of Architecture, California Polytechnic State University, San Luis Obispo  
AA Graduate Diploma, Architectural Association School of Architecture,  
London, United Kingdom

Registration: California

Teaching: Associate Professor - West Valley College





### **Michele A. Chadwick, CID, LEED® AP**

Michele, a Senior Associate with the firm, has been a key team member since joining CAS in 1990. Her professional experience encompasses programming, space planning, design, construction documentation, project administration and finish and furniture selection. As a project manager she is skilled at coordinating various team members and disciplines to ensure that projects are completed successfully and on time.

Education: Bachelor of Science, Interior Design, San Jose State University

Certification: California Council for Interior Design Certification (CCIDC)  
National Council for Interior Design Qualification (NCIDQ)  
LEED Accredited Professional (U.S. Green Building Council - USGBC)

### **Brooke L. Simons**

Brooke, an Associate, leverages her strong organizational skills and commitment to customer service, making her a major asset to every project. Brooke's experience includes lab space planning and equipment coordination, lab product specifications, laboratory detailing and MEP coordination, working with design teams consisting of consulting engineers and design-build contractors.

Education: Bachelor of Architecture, California Polytechnic State University, San Luis Obispo  
Masters of Business Administration, California Polytechnic State University, San Luis Obispo

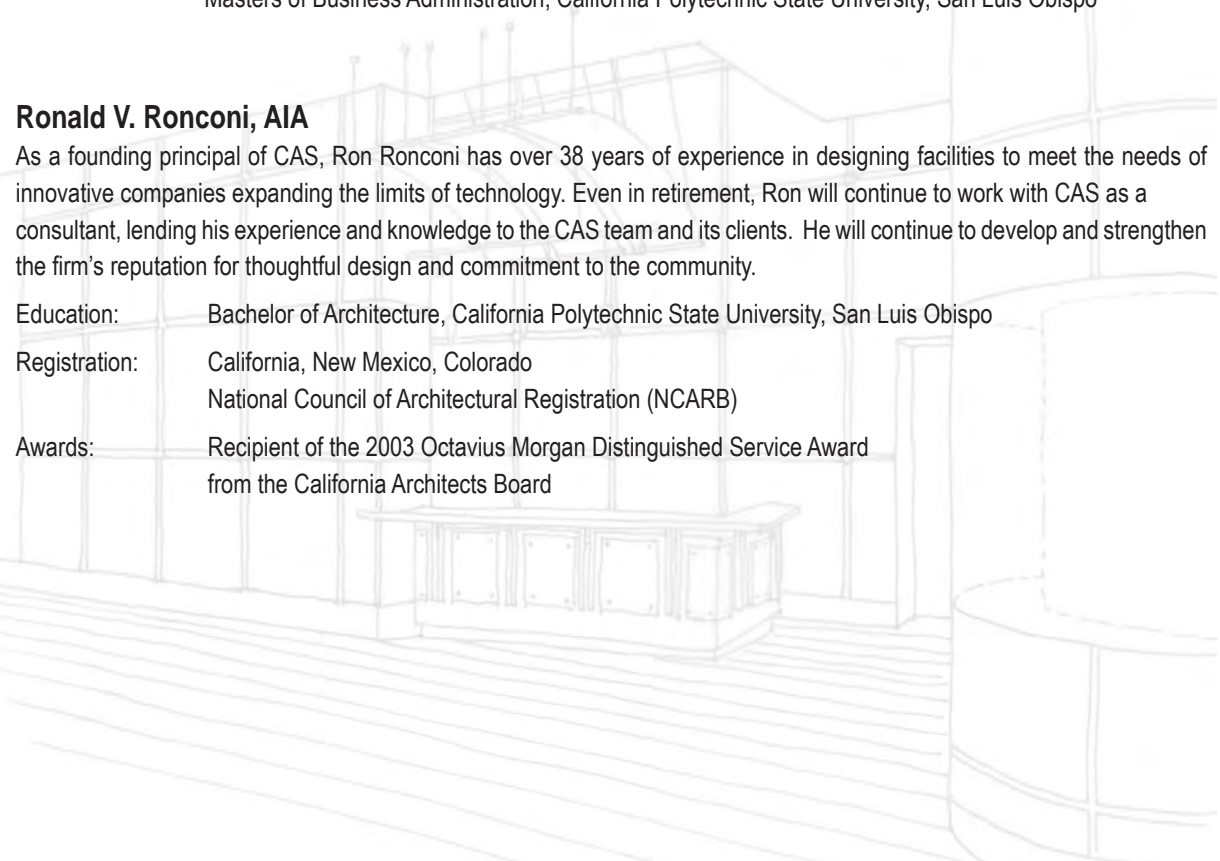
### **Ronald V. Ronconi, AIA**

As a founding principal of CAS, Ron Ronconi has over 38 years of experience in designing facilities to meet the needs of innovative companies expanding the limits of technology. Even in retirement, Ron will continue to work with CAS as a consultant, lending his experience and knowledge to the CAS team and its clients. He will continue to develop and strengthen the firm's reputation for thoughtful design and commitment to the community.

Education: Bachelor of Architecture, California Polytechnic State University, San Luis Obispo

Registration: California, New Mexico, Colorado  
National Council of Architectural Registration (NCARB)

Awards: Recipient of the 2003 Octavius Morgan Distinguished Service Award  
from the California Architects Board





## Stanford University Shriram Center Bioengineering & Chemical Engineering

Educational/University  
Laboratory Design  
Stanford, CA

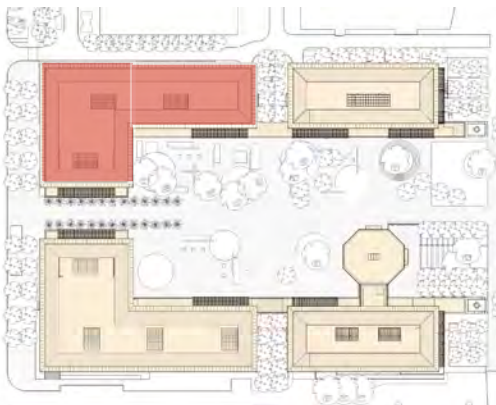
CAS provided the laboratory design for the final building in the \$400 million SEQ2 complex. The five story building houses twenty-eight research laboratories for biology, chemistry, and computational types of research and shared support facilities for imaging, fabrication shop, and specialized equipment. CAS also provided laboratory design services for the other two lab buildings within the complex, Y2E2 and the Spilker Engineering & Applied Sciences Building.

### Project Highlights:

- Develop a design that intertwines different types of labs to encourage collaborative learning.
- Light and views from the full-building atriums integrated into the lab design.

### Program Elements:

210,000 SF Research Laboratory Building  
Biology, Chemistry, & Optics Teaching Labs  
Tissue Culture Labs (BSL 1, 2, and 2+)



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## Project Experience

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## BioMed Reality Trust - Eccles

Life Sciences

Master Planning & Building Design

South San Francisco, CA

Located in the heart of the Bay Area's biotech community, the design is a site development for a 265,000 sf, R&D life sciences campus. The project is currently in the City Planning Approval phase.

### Project Highlights:

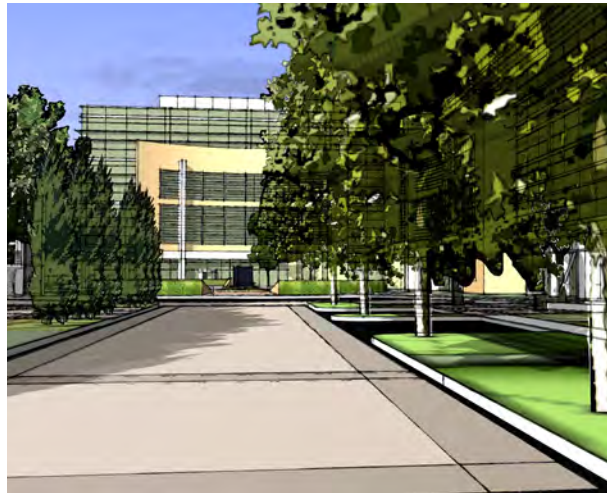
- All buildings are organized around a central, circular plaza with a small court space between the two lab/office buildings.
- The plaza consists of walkways, gardens and a water feature.
- Service operations are located along the site's perimeter road.
- R&D buildings are designed to express the elements housing labs and offices as well as the service and infrastructure components.
- Exterior balconies provide elevated views around the site.

### Program Elements:

Two, 4-story Lab and Office Building Shells

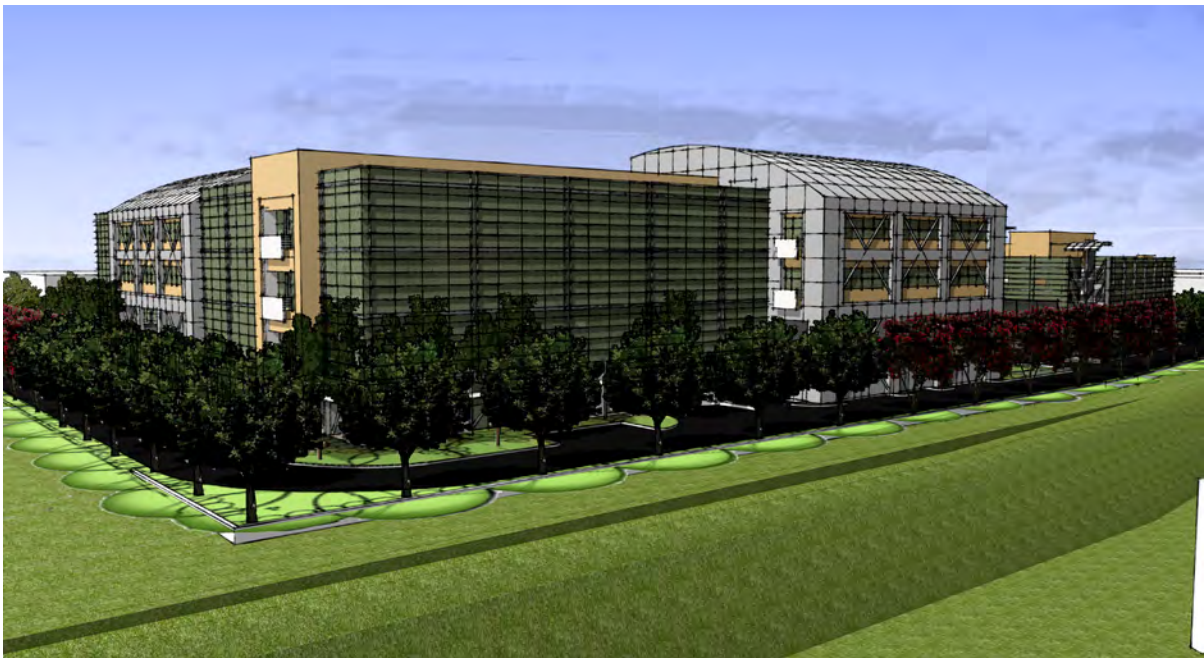
Integral Service Yard

5-story Parking Garage











## Cepheid

Life Sciences - Device Technology  
Building Renovation and Laboratory Design  
Sunnyvale, CA

Based in Sunnyvale, Cepheid is a biotech company developing and assembling fully integrated portable instruments that can be used to quickly detect infectious disease agents, human genes and contaminants. This 75,000 SF R&D Headquarters building was extensively remodeled and is the fifth building CAS has completed for Cepheid.

### Project Highlights:

- Introduction of direct and borrowed natural light into labs.
- Multi-functional dining, break-out and presentation space to support various functions.

### Program Elements:

Microbiology Suite  
Lyo/ Dry Rooms  
Development Lab  
Detection Lab  
Chemical Storage  
Office and Office Support



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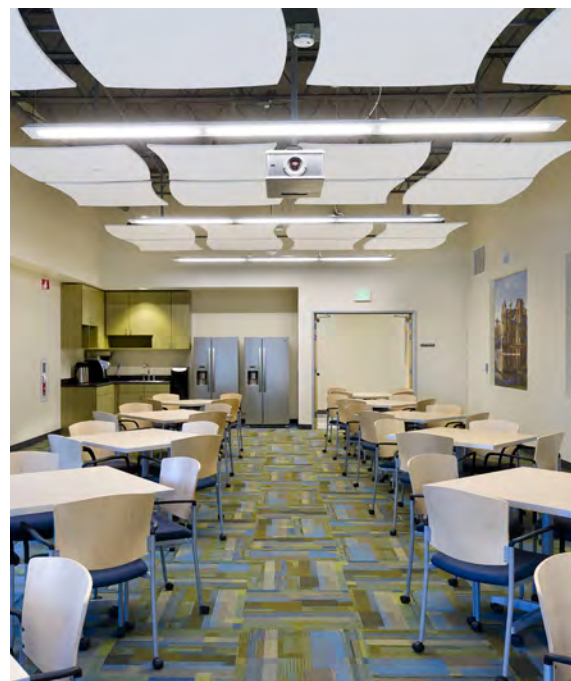


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## Project Experience

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## Project Experience

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## Stanford University Y2E2 Environment + Energy Building

Educational/University  
Laboratory Design  
Stanford, CA

CAS provided the laboratory design for the first of four buildings in the \$200 million SEQ2 complex. Spaces were shaped to accommodate specific program needs that varied from large-scale fluid mechanics to biologically based soil and plant testing facilities, as well as materials testing spaces and traditional wet laboratories.

### Project Highlights:

- Three major laboratory environments with different requirements, with space created for each.
- Proximity of labs and different faculties encourages cross-discipline interaction.
- Light and views from the full-building atriums integrated into the lab design.
- Office mezzanines provide workspaces close to the laboratories.

### Program Elements:

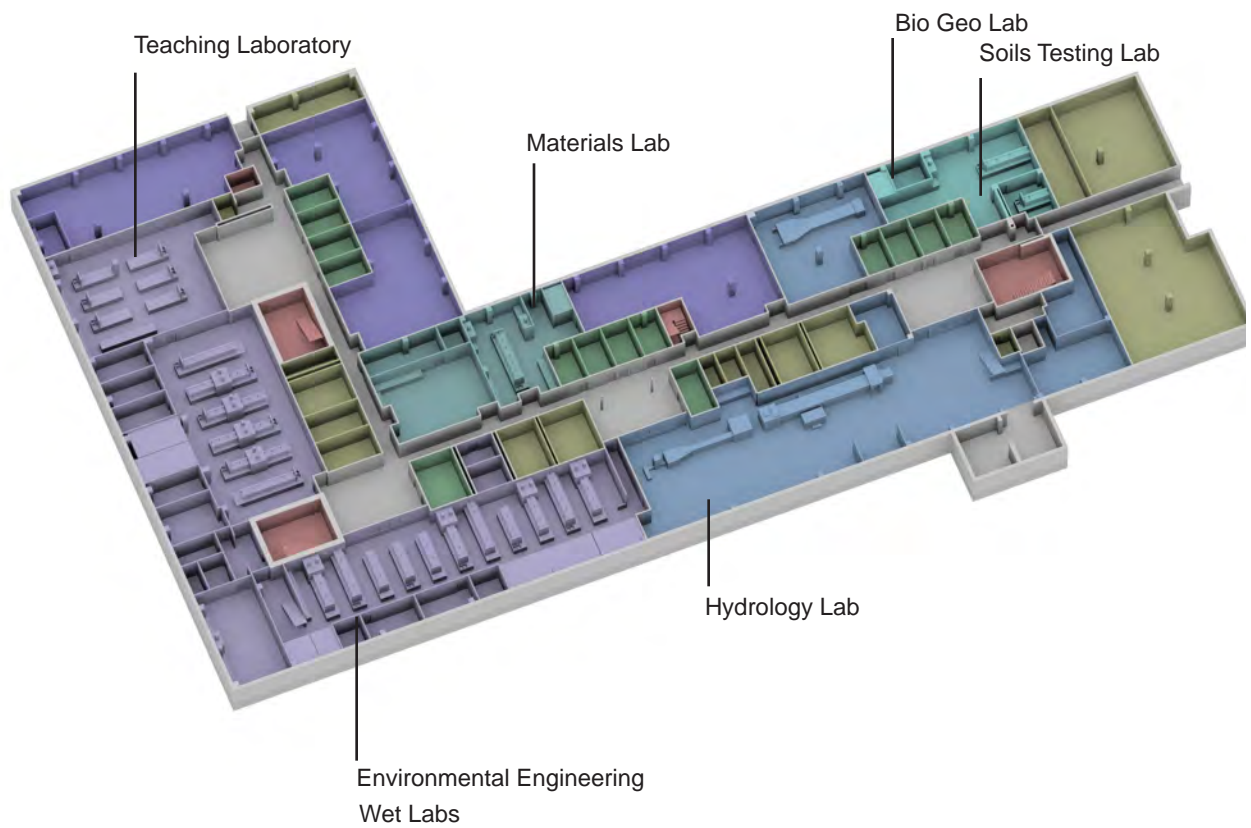
Teaching Laboratories  
Hydrology Lab  
Wet Lab  
Materials Lab  
Lab Equipment Rooms





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## Cepheid

Life Sciences - Device Technology  
Building Renovation and Laboratory Design  
Sunnyvale, CA

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Detection Lab  
Chemical Storage  
Office and Office Support



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Project Experience



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## Genentech, Inc.

Life Sciences - Pharmaceuticals  
Laboratory Design  
South San Francisco, CA

CAS designed this three-story building for Genentech's Cell Culture and Fermentation R&D group. Located along the lower campus pedestrian spine, the facility houses office and laboratory functions.

### Project Highlights:

- Open alcoves, display surfaces at the laboratory entrances and sky lit stairwells between floors serve as social hubs.
- Locating research laboratories along the building perimeter to maximizing natural light into the spaces.
- Development of a two-story glass curtain wall facing a pedestrian promenade.

### Program Elements:

Wet Laboratories  
Tissue Culture Rooms  
Environmental Rooms  
Support Offices  
Pedestrian Bridge  
Exterior Terrace



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## Project Experience

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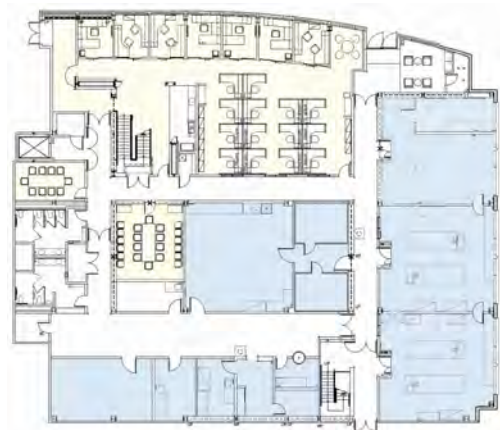


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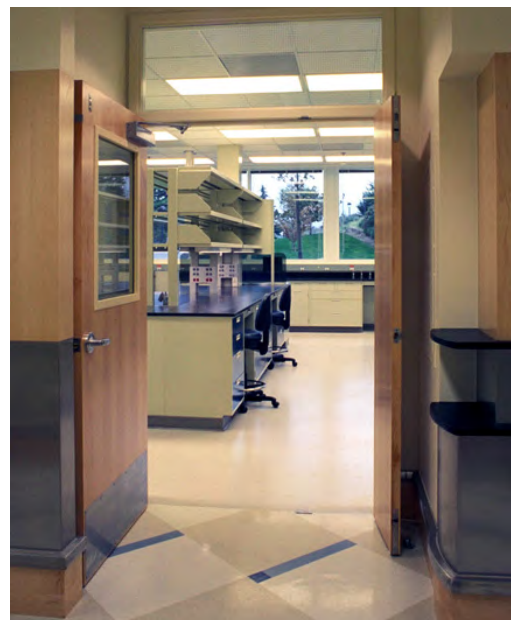


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## Project Experience

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## Pain Therapeutics

Life Sciences - Pharmaceuticals  
Building Renovation  
South San Francisco, CA

Pain Therapeutics retained CAS Architects to convert a 1950's, tilt-up warehouse into a corporate headquarters for their current operations. Located at the end of a cul-de-sac in an industrial area, CAS' main goal was to give more prominence to the building, ensuring visitors could easily identify the company's location.

### Project Highlights:

- Exposing the roof structure to allow natural light to flood through existing skylights.
- Implementing curved, perforated metal ceiling elements to diffuse natural light throughout the open office environment.
- Integrating the mechanical system into the building due to the weight limitations of the existing roof.
- Developing an integral canopy/signage element to alleviate the awkward relationship between the two site entrances off the cul-de-sac.

### Program Elements:

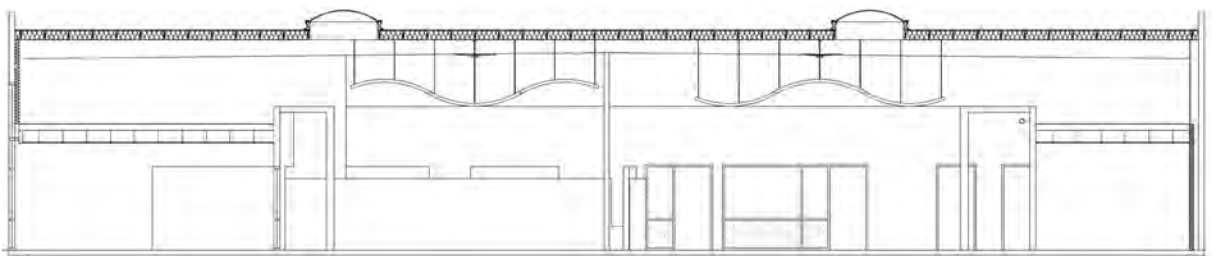
Canopy/Signage Entry Element  
Lobby  
Board Room  
Office and Support Spaces



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## Stanford University Mayer Building

Educational/University  
Building Design  
Stanford, CA

*2002 AIA/SCV Merit Award Winner*

This 25-year old laboratory research facility was renovated for the new Children's Research Program. The building was completely demolished except for the main structure which required extensive, seismic upgrading.

### Project Highlights:

- Anticipating how future technological changes may affect research space, minimizing future construction costs and disruptions.
- Doubling the number of researchers utilizing the facility with only a 500 square foot increase building area.
- Redesigning the facade to create a stronger relationship with the adjacent surroundings.

### Program Elements:

Research Laboratories  
Tissue Culture Support Spaces  
Equipment Rooms  
Glass Wash and Autoclave Area  
Private Offices  
Conference Rooms  
Break Area  
Internal Courtyard



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## Project Experience

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## Celera Genomics

Life Sciences - Pharmaceutical R&D  
Building and Laboratory Design  
South San Francisco, CA

CAS provided master site planning and full design services for this three-building campus. A new, two-story building was designed to visually integrate with the two existing buildings on the site. Comprised primarily of lab and lab support functions, this building houses approximately 65 scientists and research assistants.

### Project Highlights:

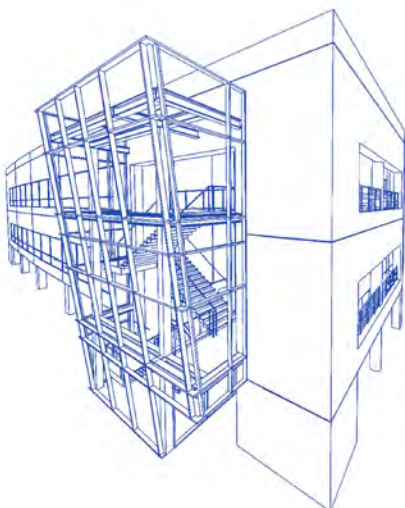
- Eight modular chemistry labs providing R&D space for a minimum of ten scientists each with individual fume hoods and lab space.
- A dedicated elevator for chemical movement and shipping/receiving docks for chemicals and hazardous material.
- Designing the site for maximum area coverage, exceeding standard FAR zoning requirements.

### Program Elements:

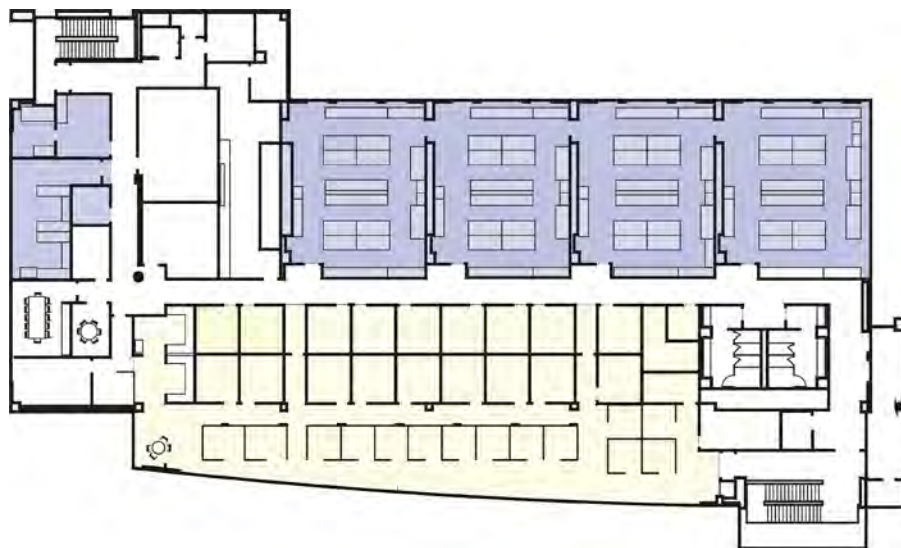
Modular R&D Laboratories  
Specialty Laboratories  
Scientist Office Support Spaces  
Dedicated Chemical Distribution  
Ground Level Parking Garage



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### Boardrooms/Presentation Rooms

Boardrooms are about formality. The ceiling, walls, lighting, furniture, and methods of presentation combine to provide an effective environment, whether for group meetings or presentations to potential clients. Integrating audio/visual equipment in a cost-effective manner is crucial to the success of these spaces.



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CAS Office



Photograph copyright © Image Center

Confidential Client



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Synaptics



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Synaptics





### Corporate Cafeterias

In addition to providing various levels of food service, Corporate Cafeterias afford opportunities for social events and day-to-day interaction among employees. Views and access to the exterior, natural day light and an architecture that promotes interaction are key aspects to a successful corporate dining facility.



DoubleClick (formerly NetGravity)

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FormFactor

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Komag

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net.com

Photograph copyright © David Wakeley





### Corporate Lobbies

A lobby provides insight into a company's corporate culture. It heralds the rest of the building. The location of the reception area, seating and access to the building all give visitors and employees clues about how the building works as a whole.



Rudolph & Sletten

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CAS Office

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AboveNet Communications, Inc.

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Synaptics

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### Office Environments

The central issue in workspace design is determining how to provide a mix of private and open workspaces with a complement of conference rooms in varying sizes. The resolution of this issue ultimately becomes the theme for the design of any office space. Introducing natural light and creating informal spaces for employees to meet and exchange ideas is also important in establishing the design.



CAS Office

Photograph copyright © Image Center



Pain Therapeutics, Inc.

Photograph copyright © Image Center



Rudolph & Sletten

Photograph copyright © Image Center



Western Digital

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### Technical Spaces

At CAS, we understand the requirements for development/ testing labs and data centers. We know that issues of adjacency, access and control must be resolved so that the work flow/process of the business is reflected in the design of the facility. Systems Support (back-up power and redundancy) is also a vital factor in maintaining a productive, profitable operation.



*Formfactor*

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*Olympus Technologies America, Inc.*

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*Ultratech Stepper*

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*AboveNet Communications, Inc.*

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## Project Experience

### Urban Revitalization

CAS provided architectural design services on several buildings for the City of San Jose Redevelopment Agency. The work was part of the Facade Improvement Program (FIP) for the Neighborhood & Industrial Development & Downtown Management Divisions.

In each project, the building designs respond to elements of the adjacent architectural context. CAS has been involved with similar projects in the City of Mountain View's downtown.



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*Carr, 701 W. Evelyn*



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*Meyer Appliance*



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*Pauline Books & Media*



*Retail Facade Upgrade*





**Cepheid**  
Sunnyvale, CA



Life Science/Commercial Office  
Building Renovation  
Bldg. 1 - 75,000 SF, \$2.9 million  
Bldg. 4 - 25,000 SF, \$890,000  
Bldg. 5 - 50,000 SF, \$5.75 million  
Bldg. 7 - 37,000 SF, \$2 million  
Bldg. 8 - 55,700 SF, \$6.5 million

**FormFactor, Inc.**  
Livermore, CA



Technical Manufacturing-Microelectronics  
Master Planning & Building Design  
Bldg. 1 - 47,000 SF, \$6 million  
Bldg. 2 - 38,000 SF, \$5 million  
Bldg. 3 - 38,000 SF, \$15 million  
Bldg. 6 - 50,000 SF, \$17 million

**Meyer Appliance**  
Mountain View, CA



Retail/Mixed Use  
Building Renovation  
Size: 10,000 SF  
Cost: \$3 million

**National Hispanic University**  
San Jose, CA



Educational/University  
Master Planning & Building Design  
Size: 10.5 acres, 65,000 SF Academic Bldg.  
Cost: \$10 million

**net.com**  
Fremont, CA



Technical Manufacturing-Microelectronics  
Master Planning & Building Design  
Size: Bldg.1 - 95,000 SF  
Bldg. 2 - 85,000 SF  
9-acre, Two Building Campus  
Cost: \$11.5 million Shell and Site Constr.  
\$18.5 million Tenant Improvements

**Synaptics**  
San Jose, CA



Technical Manufacturing  
Master Planning & Building Renovation  
Size: 160,000 SF  
Cost: \$21 million



## Project Experience

### **Rudolph & Sletten**

Redwood City, CA



Commercial Office  
Building Renovation  
*LEED CI Gold*  
Size: 39,400 SF  
Cost: \$4.6 million

### **Stanford University**

Children's Research Laboratory  
Department of Surgery  
School of Medicine



Educational/University  
Building Design  
*2002 Merit Award Winner - AIASCV*  
Size: 12,500 SF  
Cost: \$5.7 million

### **Stanford University**

Shriram Center for BioEngineering +  
Chemical Engineering



Educational/University  
Laboratory Design  
Size: Laboratory Space - 82,000SF  
Total Building - 210,000SF  
Cost: \$127 million

### **Star One Credit Union**

Northern California



Financial Institution  
Building Renovation  
Palo Alto Branch - 6,400 SF, \$1.3 million  
San Jose Branch - 5,000 SF, \$550,000  
Saratoga Branch - 2,200 SF, \$1.1 million  
Stevens Creek Branch - 4,600 SF, \$700,000  
*LEED CI Silver*

### **Western Digital**

Mountain View, CA



Commercial Office  
Building Renovation  
Size: 40,000 SF  
Cost: \$3 million

### **Z Restaurant**

Los Altos, CA



Restaurant  
Building Renovation  
Size: 7,000 SF  
Cost: \$ 350,000





## References

### **Cepheid**

Stephen Dahl, Sr. Director Facilities  
408.400.8250

### **Clontech Laboratories, Inc.**

Carol Lou, General Manager  
650.919.7300

### **Durect Corp.**

George Brown, Senior Facility Manager  
408.367.4011

### **Igenica**

Stephanie Singer, Manager of Administration  
650.231.4322

### **Flexus Biosciences**

Carlos Mena, Facility Manager  
650.244.2369

### **Molecular Devices**

Jim Duff, Facilities EHS Manager  
408.747.3554

### **NGM Bio Pharmaceuticals, Inc.**

Angela Chen, Manager of Administration  
650.243.5542

### **Orchard Therapeutics, North America**

Stewart Craig, PhD, Chief Manufacturing Officer  
650.353.5233

### **Stanford University**

Laura Goldstein, Director, Dept. of Project Management  
650.725.0569

### **Theravance Biopharma**

Jeff Lang, Head of Facilities & Operations  
650.808.6000

