



Stanford Research Park

SELF-GUIDED TOUR

Stanford Research Park Tour

Introduction:

The Research Park consists of 700 acres and includes approximately 10,000,000 square feet of R&D, office and some manufacturing buildings. The Park is acknowledged to be the first major Research Park in the world; the concept was developed at Stanford University in the late 1940's with the dual goals of:

- 1. fostering research relationships between private industry and the University's research capabilities and,
- 2. raising funds for Stanford

Directions to the Park:

If coming to the Park from San Francisco or San Francisco Airport take Highway 280 south to Page Mill Road. Turn left at intersection, continue on and as you cross Foothill Expressway, you are now entering the *Park* from the south end; on the left hand side is faculty housing for several hundred yards.

1. 1501 Page Mill Road

On your right is <u>Hewlett-Packard's</u> first site in the Park; Bill Hewlett and David Packard located their complex here in 1956; they were the eleventh tenant. HP conducts light manufacturing of test and measuring equipment here, as well as product R & D. Today HP produces an average of 11 patents a day worldwide and has a \$3.5 billion annual R & D budget.

Turn right on Hanover Street

2. 3000 Hanover Street

This is **<u>Hewlett-Packard's</u>** Corporate Headquarters; the design of this complex has won several architectural awards. Situated on a hill top, it exemplifies the company philosophy that people require attractive, pleasant surroundings to attain maximum job satisfaction and to perform to the best of their ability.

Description of Business:

Hewlett-Packard Company designs, manufactures and services products and systems for measurement, computing and communication used by people in

business industry, science, engineering, health care and education. HP's basic business purpose is to accelerate the advancement of knowledge and fundamentally improve the effectiveness of people and organizations.

Specific Products Examples:

The company's more than 22,000 products include computers and peripheral products, electronic test and measurement instruments and systems, networking systems, medical electronic equipment, instruments and systems for chemical analysis, handheld calculators and electronic components.

History:

Hewlett-Packard originated in 1939 when William Hewlett and David Packard, graduate students at Stanford, were encouraged by Stanford Professor Frederick Terman to further develop their audio-oscillator device that generates audio signals of various frequencies. Their first client was Walt Disney studios for the movie "Fantasia". The company was started in a one-car garage of the Packard's home.

Specific Business at this Location:

Corporate headquarters; administration

3. 3251 Hanover Street

Lockheed Missiles and Space (on your left)

Description of Business: Lockheed builds spacecraft and space systems, strategic missiles, antisubmarine warfare aircraft, and naval ships. The Missiles in Space division specializes in military and civilian space systems, tactical defense and communication systems.

Specific Products Examples:

Lockheed Missiles and Space is currently working on NASA's space station, sun sensors for spacecraft, thermal tile shields for the space shuttle, space telescopes, the strategic defense initiative (SDI), and fleet ballistic missiles (specifically the submarine-launched Trident II missile).

History:

The Lockheed brothers' first product was a Model 6 Hydroaeroplane in 1913. The company was formed in 1932. During the past 40 years Lockheed has built more spacecraft than any other company. In 1956, Lockheed was the tenth tenant to locate in the Park.

Specific business at this Location:

Six buildings totaling 245,000 square feet comprise this site, where research into Lockheed's Missiles and Space efforts are conducted.

Turn left on Hillview Avenue To Continue tour - cross over Foothill Expressway

4. 3333 Coyote Hill

Xerox P.A.R.C.

Description of Business:

The Palo Alto Research Center (PARC), a subsidiary of Xerox Corporation, conducts pioneering interdisciplinary research I physical, computational and social sciences.

Specific product examples:

Personal workstations - Xerox originated the concept of a personal work station where a user has local computer processing capability rather than a terminal connected with a centralized processing computer.

Laser xerographic printing - First developer of laser printing which surpasses impact printing in speed and quality.

Local area networks - First developed concept and capability for connecting personal work stations so that data can be inter-communicated; ETHERNET cabling is the licensed coaxial product which enables this.

History:

Xerox Corporation was founded in 1938; its first automatic copier to use ordinary paper was developed in 1959 and revolutionized office communications. Xerox joined the Park in 1970 to take advantage of the research opportunities associated with Stanford and the area.

Specific business at this location:

Xerox's Palo Alto Research Center (or P.A.R.C.) is one of only three research centers in Xerox; research in electro-physics and computer-related software sciences is conducted here.

Labs at 3333 Coyote Hill address computer science, electronic documents, electronic materials, and system sciences. Labs across the street at 3406 Hillview specialize in electronics and imaging.

Turn right on Arastradero Road and then right on Deer Creek

5. Turchet leasehold is where horses are boarded. This beautiful land is kept in farmland-type use because we are able to preserve our flexibility with its future use

and because much of the land here is governed by open space contracts with the County which preclude its development until 2025. Previous open space contracts resulted from a lawsuit during the 1970's brought by anti-development constituents.

To continue tour, turn right on Page Mill Road

You will be re-entering the Park again,

6. 1701 Page Mill Road

The Wall Street Journal has leased the property on the right since 1964; they receive the daily edition copy by satellite and print it here for California and Hawaii.

turn right on Hansen Way

7. 3100, 3120, 3130 Hansen Way

Varian Inc. and Varian Medical's office and research space and medical systems divisions

Description of Business:

Electronics company that designs, manufactures, and markets high-technology systems and components for product lines used by the military and commercial sectors.

More specifically: ELECTRON TUBES for communications, radar, electronic countermeasures, science, medicine, and industrial uses; OPTICAL IMAGING TUBES for night vision; SOLID-STATE devices, components, and equipment for communications and defense; ANALYTICAL INSTRUMENTS for science and industry; WAFER FABRICATION EQUIPMENT for the semiconductor industry; RADIATION EQUIPMENT for cancer therapy and industrial radiography; and VACUUM EQUIPMENT and LEAK DETECTORS for industrial and scientific processes.

Specific Product Examples:

M2000 Spunering System - Semiconductor wafer fabrication system combining for the first time several fabrication processes in one isolated vacuum.

VXR 600 Nuclear Magnetic resonance spectrometers - Offers scientists the highest resolution available for analyzing proteins and other complex molecular structures.

Night vision tubes - Gallium arsenide-based key component of night vision goggles which enable wearer to see in the dark; primary user is military.

History:

Two Varian brothers - students at Stanford - teamed with Physics Professor Willliam Hansen in 1937 to develop the world's first klystron tube (a vacuum tube capable to generating strong and stable microwave radiation); it became the heart of radar and microwave communication technology that played such a large role in World War II and beyond. The Varian's founded the Company in 1948, and were the first tenant in the Park in 1951. Notably, their first building was designed as a schoolhouse so that if the business failed, it could be converted to school use.

Specific business at this location:

Corporate headquarters; administration; Varian Research Center; research, development, and manufacturing.

To continue the tour, turn left on El Camino

8. On the left is the

Palo Alto Square Office complex. This is a multi-office-tenant complex which is intended to provide needed services, such as legal and financial, in support of our Park Tenants. There are six buildings with 285,000 square feet and a first run movie theatre.

Turn left on Page Mill Road

9. 650 Page Mill

Wilson Sonsini Goodrich & Rosati has a significant presence in the Park. Constructed in the mid 90's this 165,000 square foot office building replaced Hewlett Packard's manufacturing facility, the site original development. Wilson Sonsini is a law firm specializing in servicing high tech companies.

> Turn right on Hanover Street and then take another right on California Avenue

10. The residential area on the left hand side is known as

<u>College Terrace</u>; it is not Stanford land, and its two-block width separates the Research Park from the University campus. Note that the property owner that developed this residential community with streets names after other universities.

11. 901 California Avenue

Schering-Plough Biopharma – formerly: DNAX Research Institute

Description of Business:

Schering-Plough Biopharma conducts basic research in molecular biology. Their major thrust is directed towards an understanding of the operation and development of the human immune system. Their research includes DNA replication, gene expression and growth control, and molecular and cellular immunology.

Specific Product Examples:

Schering-Plough Biopharama studies T-cells, a type of white blood cell important in the body's immune system, and the study of the cells and proteins involved in allergic response. Progress has been made in isolating and characterizing several molecules which may be involved in inflammation, infectious diseases, and allergy.

History:

The DNAX Research Institute was founded by Alejandro Zaffaroni, Charles Yanofsky, Paul Berg and Arthur Comberg in 1980. Zaffaroni was formerly of Syntex, and Yanofsky, Berg and Connberg are Stanford Professors. The activities of the Institute are completely funded and supported by Schering-Plough Corporation who acquired DNAX Research Institute in 198s. Schering-Plough recently changed the institutes name to Schering-Plough Biopharma.

Specific business at this location:

They chose this location because it ensures opportunity for frequent interactions with scientists at Stanford and is within an hour's drive of three other important centers of biochemical and medical research - the University of California at Berkeley, San Francisco and Santa Cruz.

Turn right onto El Camino Real

12. 2650 El Camino (Corner of El Camino and Page Mill Road)

Stanford/Palo Alto Community Playing Fields

Take right turn back onto Page Mill Road

Your tour is complete!

We hope you enjoyed the circuit of the Stanford Research Park.

Additional notes of interest:

- Stanford's land continues (north) up El Camino where you can tour the University.
- Stanford's contiguous land holdings in Palo Alto amount to approximately 8,200 acres; the Park consists of 700 acres.