

# University of California San Francisco (UCSF)

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# UCSF

- Established in 1873 and is the only UC campus dedicated exclusively to the health sciences.
- Chancellor J. Michael Bishop
- Annual Budget: \$2.3 billion
- 18,200 full-part time faculty and staff - 2<sup>nd</sup> largest employer in the City and County of San Francisco
- UCSF includes:
  - Parnassus campus
    - UCSF Medical Center
    - UCSF Children's Hospital
    - Langley Porter Psychiatric Institute (LPPI)
  - UCSF Mt. Zion
    - NCI Comprehensive Cancer Center & National Center of Excellence in Women's Health
  - UCSF Mission Bay
  - UCSF Fresno
    - Residency and fellowship programs in family practice, emergency medicine, obstetrics/gynecology, general surgery, pediatrics, psychiatry and internal medicine. Approximately 180 residents training in the Central Valley.
  - Partnership affiliations agreements with San Francisco General Hospital (SFGH) and Veterans Affairs Medical Center

# UCSF

- Number of students: 2,868
- Number of residents (physicians, dentists and pharmacists in training): 1,325
  
- UCSF School of Medicine
  - 602 students
  - *US News and World Report*, 2006. Ranked fourth among research-based medical schools and 10<sup>th</sup> among primary care training.
- UCSF School of Dentistry
  - 368 students and more than 120,000 patient visits per year at 14 dental clinics in San Francisco.
  - The single largest Denti-Cal provider in California. Over the last three years, 35-40% of all Denti-Cal treatments provided by California's five dental schools were performed at UCSF.
- UCSF School of Pharmacy
  - First college of Pharmacy established in the West and 10<sup>th</sup> in U.S.
  - 489 Pharm.D students; 154 Ph.D students and 111 residents and fellows.
  - Administers the California Poison Control System
- UCSF School of Nursing -
  - 572 students – 69 Masters Entry Program in Nursing (MEPN), 358 MS, 116 Ph.D. (Nursing), 29 Ph.D. (Sociology)
  - Manages and staffs clinics throughout San Francisco and Bay Area: Glide Health Services Clinic (Tenderloin), Valencia Health Services Clinic (Mission), and Young Women's Program at UCSF Mt. Zion.
- UCSF Graduate Division
  - Offers 18 graduate academic programs in basic, clinical and policy health sciences - biological, biomedical, physical therapy
  - 842 Ph.D and 437 master's students

# UCSF

## National Institutes of Health (NIH)

- Top five recipients of NIH funding among all institutions for FY 2005
  - Johns Hopkins University (\$607.2 million)
  - University of Pennsylvania (\$471.4 million)
  - University of Washington (\$462 million)
  - **UCSF (\$452 million)**
  - Washington University (\$394.8 million)

# UCSF & NIH

- Top five medical school recipients of NIH awards in FY 2005
  - Johns Hopkins University (\$449.4 million)
  - University of Pennsylvania (\$399.3 million)
  - **UCSF (\$398.2 million)**
  - Washington University (\$377.6 million)
  - Duke University (\$349.9 million)
- Top five nursing school recipients of NIH awards in FY 2005
  - **UCSF (\$12.5 million)**
  - University of Washington (\$10.4 million)
  - University of Pennsylvania (\$7.6 million)
  - University of North Carolina, Chapel Hill (\$7.3 million)
  - University of Pittsburgh (\$7 million)

# UCSF & NIH

- Top five pharmacy school recipients of NIH awards in FY 2005
  - **UCSF (\$22 million)**
  - University of Kansas, Lawrence (\$14.7 million)
  - University of Illinois, Chicago (\$12.6 million)
  - University of Washington (\$12.5 million)
  - University of Utah (\$12 million)
- Top five dentistry school recipients of NIH awards in FY 2005
  - **UCSF (\$18.8 million)**
  - University of Michigan (\$12.9 million)
  - University of Washington (\$12.1 million)
  - University of Maryland, Baltimore (\$10.8 million)
  - University of North Carolina, Chapel Hill (\$10.1 million)

# UCSF - Research & Discovery

- Three Nobel laureates
  - J. Michael Bishop and Harold Varmus, 1989, for discovery of proto-oncogenes, showing that normal cells can be converted into cancer genes;
  - Stanley Prusiner, 1997, for discovery of prions, a new infectious agent implicated in rare, slowly progressing brain diseases such as mad cow disease.
- More than 800 active domestic and foreign patents, including;
  - Hepatitis B vaccine;
  - Cochlear implant helping deaf people to hear;
  - Magnetic Resonance Imaging (MRI);
- Singular Achievements
  - First to clone an insulin gene into bacteria, leading to the mass production of recombinant human insulin to treat diabetes;
  - First to perform a successful surgery on a baby still in the mother's womb;
  - First to develop prenatal tests for sickle cell anemia and thalassemia;
  - First to discover that a missing substance called surfactant is the culprit in the deaths of newborns with respiratory distress syndrome; first to develop a synthetic substitute for surfactant, reducing infant death rates significantly;
  - First to discover (together with Stanford) the techniques of recombinant DNA, the seminal step in the creation of the biotechnology industry.
  - UCSF's Gail Martin co-discovers embryonic stem cells in mice, and coins the term "embryonic stem cell."
  - UCSF molecular biologist, Joe DeRisi, a pioneer in the development of micro array technology, identifies the virus believed to be the cause of severe acute respiratory syndrome (SARS), marking an important advance in the effort to bring the deadly disease under control.

# UCSF & Biotechnology

- In the 1970's, UCSF Professor Herbert Boyer co-developed recombinant DNA technology and founded Genentech.
- Since founding of Genentech, UCSF has given rise to approximately 70 life sciences companies
- The state's biomedical industry accounts for nearly 260,000 jobs in California.
- Among the state's high-tech industries, only computer programming employs more workers than the biomedical industry.
- Prior to his employment at Genentech, Arthur D. Levinson, Ph.D., Chairman and Chief Executive Officer, was a postdoctoral fellow in the department of microbiology at UCSF.