

OVERALL FACILITIES AND OTHER RESOURCES

Stanford Scientific Environment

Established in 1885, Stanford University is a private research university in Stanford, California, situated between San Jose and San Francisco. Its academic strength, wealth, and proximity to Silicon Valley have made it one of the world's most prestigious universities. The most recent report from China's Shanghai Jiao Tong University ranked Stanford 2nd among the world's top universities. It was ranked the 3rd best university in the world according to *The Times* Higher Education Rankings for 2016-17. Stanford University is ranked number 5 in the *US News and World Reports* national university rankings.



The 8,180-acre Stanford campus—one of the largest in the United States—comprises ~700 major buildings which house 18 designated independent laboratories, centers, and institutes, thus providing a physical and intellectual intersection between schools and disciplines. Stanford has 2,180 faculty members, including 19 living Nobel laureates, 4 Pulitzer Prize winners, 18 National Medal of Science winners, 163 members of the National Academy of Sciences, 287 members of the American Academy of Arts and Sciences, 107 members of the National Academy of Engineering, and 29 members of the National Academy of Education. There are more than 6,009 externally sponsored projects throughout the university, with the total budget for sponsored projects at \$1.6 billion (2016–17). The federal government sponsors approximately 81 percent of its projects with approximately \$277 million in support coming from non-federal funding sources. Current enrollment (2017) totals 16,336, including 7,032 undergraduates and 9,304 graduate students.

In addition to its excellence in research and teaching, Stanford is ranked as the second most innovative university in the United States. In 2015–16, Stanford received nearly \$95 million from 779 licensed technologies. Breakthrough inventions licensed by Stanford span medicine, engineering, and the sciences. Stanford entrepreneurs have created an estimated 39,900 companies and 5.4 million jobs since the 1930s.

Stanford Medicine



Stanford Medicine integrates a premier medical school with world-class hospitals to advance human health. It comprises the Stanford School of Medicine, Stanford Health Care, and the Lucile Packard Children's Hospital.

The Stanford School of Medicine, located in the heart of the Stanford campus, is the oldest medical school in the western United States. It has 1,948 full time faculty who train 473 MD/MD-PhD

students, 861 MS/PhD candidates, 1,158 post-doctoral fellows and 1,006 residents and clinical fellows. It is a research-intensive organization with research efforts extending from basic

science discovery to the development of new diagnostics and treatment protocols. It is ranked as the second best medical school in research by the *US News and World Report*. It is the 7th highest recipient of NIH research funding, with the highest NIH funding per researcher ratio in the country. The faculty includes 7 current Nobel winners and 31 members of the National Academy of Sciences.

Stanford Health Care is located in the Stanford Hospital, a hospital recently named to the top 10 on the *US News and World Report's* Honor Roll of the best hospitals in the nation. It has 613 licensed beds, 49 operating rooms, nearly 1,600 faculty physicians and more than 1,100 residents and fellows. In addition, it has 60 clinics throughout the San Francisco Bay area. As an academic medical center, they have the unique ability to combine clinical care, research programs, and teaching to advance the understanding and practice of medicine.

The Lucile Packard Children's Hospital (LPCH) is a 361-bed children's hospital located adjacent to the main Stanford campus. It is staffed by over 650 physicians and 4,750 staff and volunteers and it specializes in the care of babies, children, adolescents, and expectant mothers. It is rated as the #10 best children's hospital in the United States by *U.S. News & World Report*, which is notable because it is also the youngest hospital on the list having been founded in 1991. LPCH has six clinical Centers of Excellence including Brain and Behavior, Cancer and Blood Diseases, Children's Heart Center, Cystic Fibrosis and Pulmonary Diseases, Pregnancy and Newborn Services, Transplant, and Tissue Engineering Program.

Stanford Department of Pathology

The Department of Pathology is a major research department at Stanford Medicine with approximately 105 faculty and teaching staff. The department occupies over 51,000 sq.ft. of administrative and laboratory space in 5 buildings, 4 of which are within easy walking distance of each other on the main campus, the fifth located off campus, adjacent to the Veteran's Affairs Palo Alto Health Care System. The research interests and activities of its faculty cover a broad range that spans from discovery in fundamental science to innovation in clinical application. Particular areas of



strength are bioinformatics, cancer biology, cell cycle regulation, genomics, inflammation, immunology, neurobiology, signal transduction, and stem cell research. The Department of Pathology is committed to maintaining educational programs to train future leaders in pathology and related fields by advancing the education of medical students, residents, graduate students, postdoctoral fellows, and clinical fellows in programs related to pathology. The department is



home to approximately 75 postdoctoral scholars and 30 graduate students from various PhD programs. Many of its 60 residents and clinical fellows are actively engaged in laboratory research as well. The department is ranked #6 nationally in NIH funding.

In addition to research, the Stanford Pathology Department provides diagnostic pathology services to the

Stanford Hospital and Clinics, the Lucile Packard Children's Hospital and the Veterans Affairs Palo Alto Health Care System. Its Blood Center provides blood, blood products, and tissue typing.

Stanford Research Support Facilities

Extensive research support facilities are available to Pathology Department faculty and staff.

Stanford School of Medicine Core Research Facilities

The Stanford University School of Medicine supports a number of shared research facilities housing specialized scientific instruments and services. These include 23 scientific Service Centers and a number of Cores, which house equipment shared among a group of labs.

Biomaterials and Advanced Drug Delivery Center (BioADD)

The Biomaterials and Advanced Drug Delivery (BioADD) Laboratory is a cutting edge research facility founded in 2010 on the Stanford University Medical Campus. Today's problems in drug design require complex answers to achieve effective delivery and treatment. The Stanford BioADD Lab helps to solve these problems with advanced modern technology and innovative solutions. Specializing in the creation of biomaterials and drug delivery agents, the lab lends its expertise toward designing and analyzing biomaterials, developing drug delivery devices and formulations, pharmacokinetic and pharmacodynamic studies, and developing smart materials for biomedical applications.

Canary Center at Stanford

The Canary Center at Stanford is a newly opened world-class facility dedicated to cancer early detection research programs. The mission of the center is to foster research leading to the development of blood tests and molecular imaging approaches to detect and localize early cancers.

Cell Sciences Imaging Facility (CSIF)

The Cell Sciences Imaging Facility (CSIF) is a Beckman Center-supported, university service center that provides high resolution, state-of-the-art light and electron microscopy technologies for imaging and analyzing the molecular and structural organization of cells, tissues, and bioengineered materials. The CSIF operates two sites at Stanford University: The SOM Beckman Center CSIF and the SOE Shriram Center CSIF. Both facility sites are open to all members of the Stanford community as well as to external academic and industry researchers (with approval of the facility Director).

Center for Clinical and Translational Research (SPECTRUM)

SPECTRUM is an independent, interdisciplinary center that facilitates clinical and translational research across Stanford University. The mission of Spectrum is to transform clinical and translational research and education at Stanford to make it more effective at discovering and implementing data-driven strategies to serve the health needs of individuals and the population.

Child Health Research Institute (CHRI)

The creation of the Child Health Research Institute (CHRI) at Stanford University provides a unique opportunity to advance the health of children and expectant mothers worldwide. CHRI's purpose is to mobilize Stanford discoveries and expertise to launch healthier lives.

Comparative Medicine Animal Histology Service (CMAHS)

The Department of Comparative Medicine's Animal Histology Service (AHS) provides a broad range of histological techniques that include standard processing and embedding methods as well as processing of larger specimens, serial and step sectioning, sectioning of frozen specimens, and a variety of staining techniques. The AHS offers special orientation

of tissues to match images from MRI, CT, and other imaging modalities or for unbiased stereology. In addition to routine hematoxylin and eosin (H&E) staining, the CMAHS also offers special stains to highlight infectious agents (bacteria, fungi), cellular elements, different cell types, and tissue matrix components, as well as immunohistochemical assays.

Computational Services and Bioinformatics Facility (CSBF)

The Computational Services and Bioinformatics Facility (CSBF) provides a variety of Macintosh, Windows, and Linux software for scientific research and general administrative use. The CSBF obtains concurrent network licenses that work under the control of a software license manager. This allows the facility to purchase a limited number of copies of expensive software and distribute the software widely within the Stanford network thus providing a substantial savings to the individual researcher.

Data Coordinating Center (DCC)

The Data Coordinating Center (DCC) is a service center of the School of Medicine that is based in the Department of Biomedical Data Science. The DCC was launched formally in March 2002 to fulfill research needs related to managing data of ongoing or new research projects in the Stanford School of Medicine. The DCC specializes in the planning, development, management, and secure implementation of systems to achieve project goals in a technologically modern environment. In particular, the DCC has expertise in integrating advanced statistical and bioinformatics tools in a technologically modern environment.

Fluorescence Activated Cell Sorting Facility (FACS)

The Stanford Shared Fluorescence Activated Cell Sorting Facility (FACS) provides state-of-the-art instrumentation, technical expertise, and flow cytometry education to Stanford researchers. The facility maintains two laboratories—the main facility located in the Beckman Center on the Stanford School of Medicine Campus and a satellite facility in the School of Medicine Innovation and Technology Park. Together they house 14 cutting-edge instruments. Technical support services include consultation on experimental design, training and/or hands-on assistance with instrument operation, and help with data analysis. In addition, the facility maintains a secure and highly redundant computer system for managing experimental data and making it accessible over the Internet.

The Fly Media Center Facility

The Beckman Fly Media Center is part of the Developmental Biology Department at Stanford University catering to labs researching *Drosophila melanogaster*. It supplies fly food and media to labs across Stanford University as well as outside customers. Adult fly as well as embryo collections can also be provided upon request.

Gene Vector Virus Center (GVVC)

To facilitate the use of these state-of-the-art methodologies by Stanford neuroscientists, the Neuroscience Gene Vector and Virus Core (GVVC) centralizes the process of producing and distributing viral vectors (adeno-associated, retro- and lentiviruses) and cDNA plasmids. In addition, the GVVC provides a wide range of additional services in the areas of virology, molecular biology, cell biology, and biochemistry, including plasmid production, mutagenesis, Q-PCR and RT Q-PCR, infectious titer assays, transient transfections, and stable cell line construction.

Genetics Bioinformatics Service Center (GBSC)

The goal of the Genetics Bioinformatics Service Center (GBSC) is to help Stanford labs do cutting-edge bioinformatics data analysis without a significant investment in laboratory personnel. The bioinformaticians supporting this service are embedded with Stanford Center for Genomics & Personalized Medicine Bioinformatics Team. Members of this team support various large-scale genomics projects at Stanford, including Stanford Sequencing Service

Center, ENCODE, Integrative Personal Omics Profiling, Human Microbiome Project, Stanford Clinical Genomics Service, CIRM Center of Excellence for Stem Cell Genomics and the Million Veteran Program.

Genome (Sequencing) Service Center (GSSC)

The Genome Sequencing Service Center (GSSC) at Stanford offers library preparation and sequencing services on a variety of Illumina platforms including HiSeq 4000, MiSeq, and HiSeq 2000/2500. The GSSC can sequence a variety of commercial sample preparation kits as well as custom workflows. GSSC allows the Stanford community access to cost-effective high throughput sequencing performed at the Stanford Center for Genomics and Personalized Medicine.

Genome Technology Center

The Genome Technology Center develops new technologies to address important biological questions that otherwise would not be feasible. Successes can involve improvements to existing technologies or completely new inventions, both of which aim to increase speed and accuracy while decreasing cost.

High Throughput Bioscience Center (HTBC)

The High-Throughput Bioscience Center's (HTBC) mission is to provide researchers at Stanford with the ability to run high-throughput chemical, siRNA, cDNA, and high-content screens for the purpose of drug and/or target discovery. The HTBC is a Stanford University School of Medicine core facility that was created in 2003 by the Department of Chemical and Systems Biology (formerly Molecular Pharmacology). The HTBC is a shared resource (Bioscience Screening Facility) for the Stanford Cancer Institute.

Human Pathology Histology Services Laboratory

The Human Pathology/Histology Service Center provides a broad range of histological services and technical expertise to Stanford investigators in human disease research. Quality preparations from paraffin and frozen embedding, sectioning, cutting scrolls for molecular diagnostics as well as specials stains and immunocytochemistry are on a per-item fee basis. The core also provides digital whole slide scanning on the Philips Ultrafast Whole Scanner.

Human Immune Monitoring Center (HIMC)

Human Immune Monitoring Center (HIMC) provides standardized, state-of-the-art immune monitoring assays at the RNA, protein, and cellular level, as well as archiving, reporting, and data mining support for clinical and translational studies. In partnership with the research community, the HIMC also works to test and develop new technologies for immune monitoring.

Neuroscience Microscopy Service (NMS)

Located in the basement of the Lorry Lokey Stem Cell Building, the Neuroscience Microscopy Service (NMS) provides access to high-end, capital-intensive microscopy equipment that is often not available to individual labs. Available equipment includes: a confocal microscope, structured illumination super-resolution microscopes, two-photon microscopes, motorized widefield fluorescence microscopes and high-powered image analysis workstations.

PET/MRI Metabolic Service Center (PMMSC)

The PET/MRI Metabolic Service Center (PMMSC) houses a state-of-the-art simultaneous whole-body PET/MRI scanner and a carbon-13 hyperpolarizer device. The simultaneous PET/MRI scanner combines the high spatial resolution and fine anatomical soft tissue detail of MRI with the high molecular specificity of PET imaging, in real-time, providing true

functional imaging capabilities. When used with MRI and/or MRS, hyperpolarized ¹³C-labeled metabolic tracers allow unprecedented real-time visualization of the biochemical pathways of normal and abnormal metabolism. PMMSC is the world's first installation of a SpinLab hyperpolarizer alongside a PET/MRI scanner.

Protein & Nucleic Acid Facility (PAN)

The Protein and Nucleic Acid (PAN) Biotechnology Facility is a multifaceted biotechnology support facility associated with Stanford University Medical Center. The PAN Biotechnology Facility offers a diverse array of instrumentation and technical capabilities and plays a significant consultative role in the application of these technologies to basic science projects.

Richard M. Lucas Center for Imaging

The Richard M. Lucas Center for Imaging has two whole-body MRI systems (3T2 and 3T3). Both are available on a pay-for-use basis to researchers throughout Stanford University as well as to non-Stanford researchers. Individual researchers are trained in magnet safety and scanner operations by the magnet manager or MR research technologists.

SPARK Translational Research Program

The Stanford SPARK program was established in 2006 to advance new biomedical research discoveries into promising new treatments for patients.

Stanford Behavioral and Functional Neuroscience Laboratory (SBFNL)

Stanford behavioral and functional neuroscience laboratory (SBFNL) is a state-of-the-art facility designed to serve as a time-efficient and cost-effective service center for researchers in need of behavioral and neuropharmacological analyses in rodents. SBFNL provides expertise in all aspects related to the design and implementation of behavioral experiments as well as data analysis and interpretation. The core is fully equipped to accommodate a full battery of behavioral tests relevant to learning and memory, sensory gating, place/fear conditioning, motor function, nociception, and anxiety-related behaviors. SBFNL specializes in genetic and pharmacological phenotyping in both mouse and rat. In addition, the center provides expertise in an array of acute and chronic experimental models of neurodegenerative disorders such as stroke and ischemic brain injury.

Stanford Cancer Institute

The Stanford Cancer Institute's mission is to support and coordinate the wide range of cancer-related activities—in basic, translational, clinical and population-based science—occurring at Stanford University, Stanford Health Care, and Lucile Packard Children's Hospital Stanford, along with its partner institution, the Cancer Prevention Institute of California.

Stanford Center for Genomics and Personalized Medicine (SCGPM)

The SCGPM applies expertise on the science and ethics of genomics to build a new collaborative model of science focused on transforming the practice of medicine. They are creating a new paradigm of patient-centered medicine that can monitor the entire genome of individuals to vastly improve disease prediction, prevention, and treatment of conditions such as cancer, diabetes, heart disease, asthma, schizophrenia, and many others.

Stanford Center for Innovation in *In vivo* Imaging (SCi3)

Stanford Center for Innovation in *In vivo* Imaging at Porter (SCi3@Porter) is a service center imaging facility that provides resources for the application and advancement of technologies for *in vivo* biological assessment and imagining in animal models. Its mission is to develop an infrastructure, strategies, expertise, and tools to perform multimodality *in vivo* imaging in animal models and/or clinical translations.

Stanford Functional Genomics Facility (SFGF)

The Stanford Functional Genomics Facility (SFGF) provides microarrays and microarray services to researchers within the Stanford community and beyond. The facility also provides 24/7 access to instruments, equipment, and software utilized within the microarray field. SFGF supports all arrays based on a microscope format including Agilent, Illumina, Nimblegen, and arrays produced by SFGF. Besides printing cDNA and oligonucleotide microarrays, the facility can also print arrays of your material in a high throughput fashion, including proteins, peptides, antibodies, cell lysates, siRNAs, etc.

Stanford Tissue Bank

The goal of the Stanford Tissue Bank is to facilitate biomedical research using tissues at Stanford, by providing services for the procurement, storage, distribution, and study of tissues.

Transgenic, Knockout and Tumor Model Center (TKTC)

The Stanford Transgenic, Knockout, and Tumor Model Center (TKTC) produces transgenic, knockout, and cancer mouse models. The facility provides low-cost DNA microinjection services, ES cell manipulations, microinjections, and tumor modeling services to all Stanford as well as external investigators. The facility also provides services on timed pregnant females, strain rederivation, embryo and sperm cryopreservation, and IVF procedures for resurrecting frozen sperm. TKTC can also provide transgenic animal tumor models and a variety of dosing/surgical services for *in vitro* and *in vivo* tumor studies.

Translational Applications Service Center (TASC)

The Translational Applications Service Center (TASC) offers a variety of analytical services, technical and scientific consulting and training, as well as pay-per-use research equipment, which allow investigators shared access to technologies that support innovative research in translational medicine. By providing centralized oversight and infrastructure for conducting translational research studies, as well as access to high-quality, cost-efficient, state-of-the-art proteomic, molecular and genomic technologies, TASC's overall mission is to serve as a comprehensive resource for accelerating the pace of advances in patient therapy and diagnosis by enhancing basic research in the early stages of translation to the clinical setting.

Veterinary Service Center (VSC)

The Stanford Veterinary Service Center (VSC) assures that the use of animals is humane and complies with all relevant policies and legal requirements. At Stanford, all research involving animals is subject to rigorous review by the University Administrative Panel on Laboratory Animal Care. In addition, the federal and state governments, as well as independent accreditation organizations, work to ensure that research animals are used only when necessary and under humane conditions. Additional services provided by the VSC include:

- animal husbandry services
- veterinary care
- oversight of animal holding areas including laboratories where animal procedures are performed
- procurement, acquisition, and exportation of animals for research and teaching
- technical services, training, and specialized facilities and equipment to facilitate animal research

The **Animal Diagnostic Lab** in the VSC provides veterinary clinical pathology support for investigators using animal research models. Services include hematology, clinical chemistry,

serology, cytology and fluid analysis, microbiology and parasitology. Specialized testing including immunologic and endocrine assays is available.

Additional Core Facilities

[Bio-X](#)

The Mission of Bio-X is to catalyze discovery by crossing the boundaries between disciplines, to bring interdisciplinary solutions and to create new knowledge of biological systems, in benefit of human health.

[ChEM-H \(Chemistry, Engineering & Medicine for Human Health\)](#)

Stanford ChEM-H brings together chemists, engineers, biologists, and clinicians to understand life at a chemical level and apply that knowledge to improving human health.

[Medicinal Chemistry Knowledge Center](#)

The goal of the Stanford ChEM-H Medicinal Chemistry Knowledge Center is to help biologists and clinicians at Stanford incorporate medicinal chemistry into their ongoing and future research endeavors.

[Stanford Nanocharacterization Lab](#)

The mission of the Stanford Nanocharacterization Lab is to provide high-quality, useful data and insight for as wide a range of users as possible using several types of high-resolution microscopes, X-ray diffractometers, and surface science analytical instruments.

[Stanford Nanofabrication Facility](#)

Although conceived as an electronics-based research facility, the Stanford Nanofabrication Facility now supports researchers in applications ranging from medicine and biology to fundamental physics and astronomy. The facility supports researchers from all disciplines wishing to explore uses of micro- and nano- fabrication.

[Stanford University Mass Spectrometry](#)

Beyond making available state-of-the-art, user-friendly facilities and services, the Stanford University Mass Spectrometry laboratory enables education, methods development, and new applications development, designed to meet the rapidly evolving needs of researchers.

Stanford Libraries

[Stanford University Libraries](#)

Stanford University Libraries include more than 20 campus libraries with 9.5 million physical volumes, and > 1 million scholarly items in the Stanford Digital Repository. The library collections comprise a broad array of electronic information resources including an online library catalog and several hundred article and indexing databases and electronic journal subscriptions.

Stanford Computer Centers

[Stanford IT Services Desk](#)

Stanford's IT Service Desk provides assistance to clients from the University (faculty, staff, students, and affiliates) as well as the hospitals and clinics on a wide range of computer and communications issues, including computer support and security. Each of Stanford's seven schools and many of its auxiliaries and centers have a team that supports IT locally. BigFix,

Stanford's computer and security management tool, is installed on all laptops and desktops used for School of Medicine business including Stanford-owned computers and personally-owned computers that store Stanford data.

Stanford Research Computing Center

The Stanford Research Computing Center (SRCC) is a joint effort of the Dean of Research and IT Services to build and support a comprehensive program to advance computational research at Stanford. That includes offering and supporting traditional high-performance computing (HPC) systems, as well as systems for high throughput and data-intensive computing.

Sherlock Cluster

Sherlock is a high performance computing (HPC) cluster administered by the [Stanford Research Computing Center](#). It is available to all Stanford faculty for computing associated with their research.

FarmShare

FarmShare is Stanford's community computing environment. It is primarily intended for use in coursework and unsponsored research.

Stanford Pathology Facilities

The Stanford Pathology department occupies over 51,000 sq. ft. of administrative, clinical, and laboratory space in primarily 5 buildings, 4 of which are within easy walking distance of each other on the main campus; the fifth located off campus, adjacent to the Veteran's Affairs Palo Alto Health Care System. The Pathology Department administrative suite (L235) and Chairman's office (L231) are located in the Lane Building of the Stone Complex which also houses a dedicated conference room [L201 (~460 sq.ft.)] for lectures, seminars, lab meetings, etc. The department has additional conference rooms in the Center for Clinical Sciences Research Building [3226 (347 sq.ft.) and 3236 (227 sq.ft.)] and in the Edwards Building of the Stone Complex, [R204 (~300 sq.ft.)], which also serves as the departmental library.

E.D. Stone - Lane Building (Pathology research space: 14,622 sq.ft.)

The Lane Building houses the research laboratories of 7 pathology faculty. Shared space

includes 2 cold rooms [L218 (229 sq. ft.), L330 (230 sq. ft.)], a glasswash facility [L320 (299 sq.ft.)], a microscope room [L206 (60 sq. ft.)], and 4 equipment rooms [L220B (158 sq.ft.); L221 (127 sq.ft.); L222 (142 sq. ft.); and L216B (119 sq.ft.)].

Shared Pathology Department equipment includes 5 centrifuges (low speed and ultra), 2 Alphamager HP Imaging Systems, a Beckman LS 6500TA scintillation counter, multiple incubators, 3 New Brunswick shaker/incubators, a sonicator, 2 microscopes/cameras, one Nikon Eclipse E800 confocal microscope, a Leica CM3050 S cryostat, a transilluminator, an x-ray film processor, a cryostorage unit, 2 printers (1 color laser) and an ice machine. The Lane Building is also home to the Department of Pathology Image Lab Services (L206; 60 sq. ft.)—a service available to all Pathology staff for the creation of professional quality photographs, illustrations and graphics used for scientific publications, clinical diagnosis, teaching, research, and grant applications. Researchers in the Lane Building also have easy access to shared facilities in the Edwards Building, which is directly connected by a short hallway.



E.D. Stone - Edwards Building (Pathology research space: 15,408 sq.ft.)



The Edwards Building houses the research laboratories of 8 pathology faculty. Shared space includes 3 cold rooms [R244 (109 sq.ft.); R276 (119 sq. ft.); and R325 (42 sq.ft.)], a glasswash facility [R280 (290 sq.ft.)], 3 microscope rooms [R232 (80 sq.ft.); R234 (80 sq.ft.); R303 (52 sq.ft.)], and 2 equipment rooms [R236 (173 sq.ft.); R363 (140 sq.ft.)]. Shared Pathology Department equipment includes 4 Laser confocal microscopes

(Zeiss Axiovert 200M; Leica TCS SP8X; Leica TCS SP5; Zeiss Axio Observer.Z1 LSM 700), 2 imaging systems (BioTek Inst. Cytation 3; Alphamager HP), 2 realtime PCR machines (Stratagene MX3005P; ABI, StepOnePlus), 1 fluorescent microscope/camera (Zeiss Axio Imager.M2/Zeiss AxioCam MRm), 1 Illumina MiSeq DNA sequencer, 1 ForteBioOctet RED96

extended detection system, 1 10xGenomics Chromium controller, 1 Typhoon model 94101 BioTek scanner, 1 microplate reader, 8 centrifuges (low speed and ultra), 5 shaker/incubators, 2 spectrophotometers, 2 color laser printers, 1 speedvac, 1 portable LCD projector and 2 ice machines. Researchers in the Edwards Building also have easy access to shared facilities in the Lane Building, which is directly connected by a short hallway.

Center for Clinical Sciences Research Building (CCSR) (Pathology research space: 6,309 sq.ft.)

CCSR houses the research laboratories of 4 pathology faculty. Shared space includes a cold room [3251 (139 sq.ft.)], 3 fume hood rooms [3243, 3253, 3263 (each 140 sq.ft.)], a glasswash room (3241A (145 sq.ft.), and 4 equipment rooms [3241(109 sq.ft.); 3242 (164 sq.ft.); 3261/3261A (214 sq.ft.); and 3262 (103 sq.ft.)]. Shared Pathology Department equipment includes 1 alphaimager 2200 Imaging System, 1 Applied Biosystems (7500) realtime PCR machine, 1 BD Biosciences flow cytometer, 1 Nanodrop 2000 spectrophotometer, 1 Molecular Devices VersaMax plate reader, 1 Leica EG1150 H tissue embedder, 1 Leica ASP300 S tissue processor, and 1 Beckman J25i Centrifuge.



Hillview Building (Pathology research space: 11,441 sq.ft.)



The Hillview Building houses the research laboratories of 8 pathology faculty. Shared space includes a glasswash room (257 (404 sq.ft.) and 3 equipment rooms [204 (411 sq.ft.); 206 (149 sq.ft.); 261 (462 sq.ft.)]. Shared Pathology Department equipment includes 1 MiniSims TOF-HR mass spectrometer, 2 digital imaging systems (Alpha Innotech; FUJIFILM LAS-3000), 1 DVS Sciences CyTOF-2 mass cytometer and autosampler, 1 Olympus

BX51 fluorescent microscope, 1 Agilent bioanalyzer, 1 Molecular Devices SpectraMax 190 plate reader, 2 centrifuges (low speed and ultra), 1 CO₂ incubator, 1 shaker/incubator, 1 speedvac, and 1 printer.

The Lokey Stem Cell Research Building (Pathology research space: 3,239 sq.ft.)



The Lokey Stem Cell Research Building houses the research laboratories of 4 pathology faculty. Shared space includes a glasswash suite (G0101/A (823 sq.ft.), 5 special procedure rooms [G2004 (380 sq.ft.); G2031 (115 sq.ft.); G2041 (201 sq.ft.); G3003 (378 sq.ft.); and G3131 (116 sq.ft.)], 4 tissue culture rooms [G1160 (410 sq.ft.); G2037 (192 sq.ft.); G2039 (201 sq.ft.); and G3161 (284 sq. ft.)], 2 autoclave rooms

[G2123 (115 sq.ft.) and G3123 (113 sq.ft.)], a chemical storage room [G0103 (149 sq.ft.)], 4 cold rooms [G2025 (234 sq.ft.); G2033 (181 sq.ft.); G3027 (234 sq.ft.); and G3126 (116 sq.ft.)], 2 dark rooms [G2127 (115 sq.ft.) and G3129 (116 sq.ft.)], and 3 equipment/instrument rooms [G2013 (1545 sq.ft.); G2047 (327 sq.ft.); and G3124 (61 sq.ft.)]. The Lokey Stem Cell Building also has 4 conference rooms available to Pathology staff [G1002 (801 sq.ft.); g1161 (688 sq.ft.); G2000 (338 sq.ft.) and G3000 (338 sq.ft.)].