

Welcome to the Li Ka Shing Center for Biomedical and Health Sciences. Our goal is to provide you with the best research facilities anywhere, ensuring a safe, secure, dependable, friendly, and productive environment. This document provides an overview of the operation, scientific services, health, safety, comfort, and convenience features of our building.

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Operations

LKS Center Staff Offices

LKS Building Management, room 171

LKS Environment, Health and Safety, room 173

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Emergency Response Plan (ERP)

In place is a system to identify and preserve critical research operations and to respond to problems accordingly. The failure of critical infrastructure will trigger a call to building management staff which can then coordinate with Facilities Services to correct the problem, 24/7. Building management staff can also contact key members of labs if the situation warrants. Please contact us to incorporate your operations into our ERP.

Stockroom and Receiving

Biological Sciences Division (BDS) operates a stockroom in Barker Hall and provides receiving support in LKS Center. Information on the stockroom can be found at <http://mcb.berkeley.edu/barker/storeroom/>. Lucy Brandauer is in charge of receiving at LKSC. Her office is room 185 and he can be reached at 510-664-4852 or lucyb@berkeley.edu.

Mail Room

The mail room is located in room 175. Mail bins are available for faculty, labs and departmental offices. Also located in the mail room are bins for outgoing USPS, campus and MCB mail. The door is operated by the common use key but the door should remain unlocked. The mail code for the building is 3370.

Conference Rooms

Six conference rooms for meetings (not to be used for classes or office hours) are available for use by occupants of the building. They are rooms 215, 315, 345, 415, 445 and 515. For high profile events, room 545 may be booked. The General Assignment Classroom 245 (299 seats), may be reserved after hours and on weekends for a fee. A departmental classroom room 125 (78 seats) may also be reserved after hours and on weekends for a fee. All rooms have overhead projectors. Lobbies on Level 1 and 2 are also available on a case by case basis for events. Availability for all rooms may be viewed at <http://lks.berkeley.edu/cgi-bin/Calcium40.pl>. Occupants can book the conference rooms. Please contact us or your lab manager for login information for the calendar. Reservations for the classrooms, lobbies and 545 may be requested by sending an email to lks_reservations@berkeley.edu.

Keys and Electronic Card Keys

Access to the building, labs, conference room 545 and some of the core facilities is via electronic card key. Except for winter and spring breaks, the building is unlocked M-F 7:45 a.m through 6:15 p.m. If classes, midterms or finals are scheduled later than 6:00 p.m., the lobby doors at Level 2 remain unlocked accordingly. Please do not allow others to tailgate in behind you when the building is locked, unless you know them. Safety and security depend on you. Offices, conference rooms and common use facilities are secured with metal keys. We require authorization by faculty, lab managers or staff managers to issue keys or card key access. Please complete a form available on line at <http://lks.berkeley.edu/lks/> and have your lab manager,

faculty advisor or staff manager sign it. We charge \$15 to replace lost keys. Please return keys to us when your studies or employment are completed.

Security

Due to the sensitivity of the research being conducted at Li Ka Shing Center, security is higher than in other buildings. We have Security Patrol Officers patrolling the building on evenings and weekends. Please be courteous to them, as they are here for your safety and security. If they don't recognize you, they may ask to see your Cal ID, which should have an "LKSC" sticker on it to show you belong in the building. If you don't have the sticker, offer to show the officer you have access by using your card key to unlock a door in the building. Stickers may be obtained from the LKS Center building staff.

Copiers

There is a copier/scanner in the mail room 175. It is managed by the UC Moffitt Library Copy Center. You can obtain a copy code directly from the Copy Center. Be prepared to give the service a contact name and a chartstring.

Moffitt Library Copy Center
643-7427 or via e-mail
copycenter@library.berkeley.edu

Copies are recharged to the chartstring at \$0.00762 per sheet (less than a penny!). You need an account to scan, but scanning to an email address is free.

Lighting Control

Overhead lights in corridors, labs and other general use areas are controlled locally by wall switches and by a lighting control system. Each area has been programmed to turn lights off at a specific time for that area. About five minutes prior to turning lights off, the lights will blink as a warning. To override the lights being turned off, simply toggle the light switch in your lab that controls the overhead lights.

Bike Storage Room

There is a locked bike storage area for MCB and PMB researchers on the ground floor of the GPB Parking Garage just north and east of the building. For access please contact Greg Vitan (vitan@berkeley.edu). Your bike must be registered and the license affixed to the bike.

Contact Us

For most support needs, email us at lks_help@berkeley.edu

For room reservation support, email us at lks_reservations@berkeley.edu

Or visit us in person in 171 Li Ka Shing Center.

24/7 on-call phone support: 510-502-8365

Also, you may visit <http://lks.berkeley.edu>

Other Important Contacts

UC Police Department (emergency)	510-642-3333 or 911
UC Police Department (non-emergency)	510-642-6760
EH&S Hazardous Materials Spills (chem, bio, rad)	510-642-3073 (business hours)
EH&S Hazardous Materials Spills	510-642-6760 (non-business hours)

Science

Flow Cytometry

The CRL Flow Cytometry Facility operates two cores: one in the Li Ka Shing Center room 461 and one in the Life Sciences Addition (LSA) room 491. Manager (for LKS Core and for LSA Core): Hector Nolla, hectorno@berkeley.edu, 642-2843, 491 LSA.

The Flow Cytometry Core Facility instrumentation provides light scattering and fluorescent based measurements of single cells by laser excitation. Applications of this technology include identification of sub-populations of cells by means of immunofluorescence, gene reporting using GFP, YFP, RFP CFP and M-Cherry, DNA content, as well as functional Ca⁺⁺ Flux, and cell viabilities. Populations identified by the applications mentioned above can be separated and purified by cell sorting. Cells can be sorted in bulk (up to 6 way sorting) or by single cell deposition into 96 well plates (other plate templates like 6, 24, 48 well and Terasaki plates are also supported) or glass slides.

Viral Packaging Facility

Access Manager: Mary West, mwest@berkeley.edu, 510.664.4112. 385A Li Ka Shing Center is equipped to handle the viral packaging needs for building researchers, this facility contains 2 BSL-2 certified hoods, 4 incubators, refrigerated centrifuge, -20 freezer, deli fridge, and ultracentrifuge with appropriate rotors for virus purification protocols. Supplies are the responsibility of the users as well as maintenance and repairs. Training is provided by experienced users and organizational meetings are held 4 times a year. If you are interested in using the facility please contact Mary West to discuss your needs.

High Throughput Screening Facility

Manager: Pingping He, pingpinghe@berkeley.edu, 510.642.5496; or alternatively, Mary West, mwest@berkeley.edu, 510.642.4112. 461 Li Ka Shing Center has a High-end instrumentation facility provides access to cell culturing space, automated liquid handling, automated plate reader and high-throughput, high-content microscopy instrumentation for screening experiments, along with tools for analysis and data visualization. Emphasis is on whole genome and sub-library siRNA screening, CRISPR/Cas9 screening validation processing; other high-throughput fluidics projects are welcome.

QB3 Research Core Facilities

QB3 operates 9 core facilities, seven of which are located in Stanley Hall. For an up-to-date listing of the facilities and their offerings, please visit <http://qb3.berkeley.edu/cores>

Biomolecular Nanotechnology Center

Manager: Paul Lum, p_lum@berkeley.edu, 666-3356, 121 Stanley Hall

The BNC is a fabrication and experimentation facility specializing in BioMEMS and microfluidic devices, offering lithography, deposition, etching, metrology, and microscopy equipment and facilities for biological experimentation. The BNC also houses instructional labs and incubator space.

Central California 900 MHz NMR Facility

Manager: Jeff Pelton, jgpelton@berkeley.edu, 666-2752, B202A Stanley Hall

This facility promotes the understanding of the structures and dynamics of natural products, potential therapeutics, proteins, and nucleic acids at the atomic level.

Instruments include a 900 MHz spectrometer equipped with a cryoprobe, along with several other NMR systems.

CIRM/QB3 Shared Stem Cell Facility

Manager: Mary West, mwest@berkeley.edu, 664-4112, B108 Stanley

Designed to enhance stem cell research amongst UC Berkeley and QB3 investigators, as well as other local area laboratories, the facility provides all of the cell culture equipment and instrumentation needed to grow and assess stem cells from flow cytometry to multiplex ELISA reader to automated epifluorescence, confocal, and multiphoton imaging.

Computational Genomics Resource Laboratory (CGRL)

Manager: TBD, cgrl@berkeley.edu, 643-9092, 238 Koshland Hall

The CGRL provides technical expertise and training opportunities in experimental design and data analysis of projects using next-generation genomic sequencing and other high-throughput technologies. John Taylor and Brian Staskawicz direct this newest QB3 core facility.

Functional Genomics Laboratory

Manager: Yoon Gi (Justin) Choi, jygchoi@berkeley.edu, 642-1165, 255 Life Sciences Addition

The FGL conducts research in functional genomics, specializing in the fabrication, use, and analysis of DNA microarrays for large-scale gene expression profiling and genetic profiling, and providing full services for Affymetrix GeneChip arrays and Agilent DNA microarrays.

QB3/Chemistry Mass Spectrometry Facility

Manager: Ulla N. Andersen, norklit@berkeley.edu, 666-3633, B208 Stanley

The facility provides routine acquisition of mass spectra and accurate mass measurements of biological, organic, and inorganic compounds, as well as mass measurements of intact proteins, lipids, oligosaccharides, and non-covalent protein-protein and protein-ligand complexes and supramolecular coordination clusters. The facility also provides advanced proteomics analysis and operates an open access laboratory.

QB3 MacroLab

Manager: Chris Jeans, 642-6445, B202 Stanley

The QB3 MacroLab offers automated gene cloning, protein expression, protein purification, and crystallography, which enable researchers to expand the scope of protein-structure discovery and advance fundamental understanding of biochemistry.

Vincent J. Coates Genomics Sequencing Laboratory

Manager: Shana McDevitt, shana.mcdevitt@berkeley.edu, 666-3372, B206 Stanley

This facility offers whole genome sequencing, genomic resequencing, ChIP-sequencing, RNA expression, small RNA discovery, and bisulfite sequencing on three Illumina HiSeq 2000 instruments.

Vincent J. Coates Proteomics/Mass Spectrometry Laboratory

Manager: Lori Kohlstaedt, kohlstaedt@berkeley.edu, 666-3632, B205 Stanley

The P/MSL provides comprehensive proteomics services using mass spectrometry, determining the protein contents of samples as simple as gel bands or as complicated as whole cell extracts. The facility provides identification of posttranslational modifications and relative quantitation as well as consultation regarding sample preparation and experimental design.

Warm Rooms

LKS Center has 3 warm rooms equipped with shakers for general use by building occupants. The rooms are monitored by a central system which calls building management in the event of temperatures out of range. Controllers mounted outside the door display current temperature and log the historical temperature on a digital chart. Please do not remove flask holders for use on your own shakers.

<u>Room</u>	<u>Temperature</u>
263	37°C
363	30°C
463	37°C

Cold Rooms

LKS Center has ten cold rooms set at 4°C located on 2, 3, 4, and 5 for use by each floor's researchers. The rooms are monitored by a central system which calls building management in the event of temperatures out of range. Controllers mounted outside the door display current temperature and relative humidity, along with trend data. We can download historical data if needed. Local alarms will sound for one of two reasons: temperature is above 10°C or the interior personnel alarm has been activated. The personnel alarm can be reset by pulling the alarm button, located by the door near the floor. Please limit the amount of time doors are open, as this allows the room to warm, wastes energy and calls us signaling an alarm.

Ice Machines

Ice machines are located throughout the building. Do not use the ice for human consumption. The water from the lab sinks is industrial water and non-potable.

<u>Floor</u>	<u>Room</u>
2	210 and 275B
3	310 and 375C
4	410 and 475B
5	510

Autoclave and Glasswash Rooms

Central autoclave and glasswash rooms are located in room 254, 454 and 554.

Piped Utilities

Various pipe utilities exist for your use, including CO₂ (approximately 14 psi), dry compressed air (approximately, 100 psi), vacuum (-24 to -29 inches Hg) and natural gas. Liquid nitrogen is available in room 183. For the time being, liquid nitrogen is available at no cost for small quantities.

Darkrooms

Rooms 310B and 410B are outfitted with Konica SRX101 x-ray film processors.

Emergency and Defrost Use -80 Freezers

We have two spare -80 freezers in room 183 for use when you need to defrost your freezer or when your freezer fails and contents need to be stored while the freezer is being repaired.

“Frosty” is used for Defrosts and “Rudolph” is used for emergency storage. Please properly mark your items with your lab’s name. To reserve the spare freezers, please send an email to LKS_Reservations@berkeley.edu. To view the reservation calendar, go to <http://lks.berkeley.edu/cgi-bin/Calcium40.pl?Op=Splash&TestCookie=CalciumSessionID> site.

Shared Instruments

The facility has a number of scientific instruments that are shared. Please see the attached appendix for the list of the instruments and their locations. Please note those instruments highlighted in yellow utilize a calendar to schedule use. Contact the “Person in charge” or “Super User” to add you to the calendar. We request labs contribute to the cost of maintenance contracts, prorated by lab size. Please contact us so we can set up the billing.

Safety**Spill Kit Rooms**

Floors 1 through 5 have rooms dedicated to storage of spill control kits. Please use the products provided only if you are trained and you are comfortable with the size and composition of the spill. When in doubt, alert others to evacuate, close doors and call EH&S for cleanup assistance. Alert and consult with EH&S Specialist Thom Opal using our 24/7 facilities line: 510.502.8365. Please notify our facilities team (lks_help@berkeley.edu) if all spill materials are used, so we can replenish them.

<u>Floor</u>	<u>Room</u>
1	103
2	270A
3	370A
4	470A
5	586

Rad Waste

Room 177: access can be arranged for authorized researchers listed on your Radiation Use Authorization (RUA). Please contact LKSC Health & Safety Specialist.

Medical Waste

Room 191: access can be arranged for authorized researchers listed on your Biological Use Authorization (BUA). Please contact LKSC Health & Safety Specialist.

Lab Coat Laundry Service

Room 175 (mailroom) has a hamper for dirty lab coats and a coat rack for clean lab coats returned. Pick up and drop off occur on Tuesdays.

Comfort and Convenience

Kitchenettes and Break Rooms

Kitchenettes are located on the research floors 2 through 5 (rooms 238, 338, 438 and 538), and are available to everyone sharing the floor. Each is equipped with 2 fridges, 3 microwaves, a dishwasher, a sink, recycling, trash and composting bins. Please clean up after yourselves. Plenty of tables, stools and chairs exist on each floor's lobby for your use and comfort.

Yali's Cafe

Yali's Café is located across Oxford St. at the corner of Berkeley Way and is open M-F 7 a.m. to 7 p.m. and Saturday/Sunday 7 a.m. to 5 p.m. For more information on Yali's Café, please visit: <http://www.yaliscafe.com/>

Pat Brown's Grill

Operated by Cal Dining, Pat Brown's grill is located in the Genetics and Plant Biology (GPB) Building northeast of LKS Center and is open M-F 7:30 a.m. to 5:00 p.m. For more information on Pat Brown's Grill and other nearby Cal Dining facilities, please visit http://www.housing.berkeley.edu/dining/pat_browns.html

Showers

Three shower rooms are provided on the first floor, rooms 178, 180 and 182. The doors remain locked and are operated by the building's common room key. Privacy locks are installed on the inside of the door. Please bring your own toiletries and towels and remove them as you leave.

Has a Google Calendar Sign Up				
Equipment	Model	Serial #	Location	Person in Charge
Bioanalyzer	Agilent 2100 Bioanalyzer	DE13804437	475D	Bob Lesch (Schekman Lab)
Centrifuge High Speed	Avanti J-E HPC High speed centrifuge, JLA-16.250 RTR w/ Biosafe lid	JSE12D06	430A	Kelsey Hennick (Hockemeyer Lab)
Centrifuge High Speed	Thermo Sorvall RC3BP Plus	A4357	230	Hongfeng Gao (Dan Lab)
Centrifuge High Speed	Thermo Sorvall RC3BP Plus with 6x1000 ml rotor	41309820	310	Eugene Oh (Rape Lab)
Centrifuge High Speed	Thermo Sorvall RC3BP Plus with 6x1000 ml rotor	41309821	310A	Eugene Oh (Rape Lab)
Film processor-darkroom	Konica SRX101		310B	Diane Haakonsen (Rape Lab)
Film processor-darkroom	Konica SRX101		410B	Franziska Lorbeer (Hockemeyer Lab)
Freezer -80 bldg backup	Sanyo MDF-U76VC	12017J0031	183	Sarah Pecora (Facilities Management)
Gel documentation-DNA/EtBr	BioRad GelDoc XR+	721BR05974	430A	?
Gel documentation-DNA/EtBr	BioRad GelDoc XR+	721BR05929	310C	?
Imaging System Phosphorimager	BioRad Pharos FX Plus w/ 488 and 635 nm external laser, EraserScreen-K, 605DF50 and 640DF50 fluorescence and phophor imaing filters	447BR1213	475D	Bob Lesch (Schekman Lab)
Irradiator	Precision X-Ray X-Rad 320.	1208-2044	B140	Kelsey Hennick (Hockemeyer Lab)
Microscope	AMG EVOS	C1612-164D-011	410A	Shawn Shirazi (Kaufer Lab)
Microscope inverted TC	Olympus IX51 with 4x, 10x, 20x, 40x phase objectives, fluorescence DAPI, FITC, CY3, CY5 filters, X-Cite biger system.	2B06228	385A	Mary West
Microscope inverted TC	Olympus IX51 with 4x, 10x, 20x, 40x phase objectives, fluorescence DAPI, FITC, CY3, CY5 filters, X-Cite biger system.	2A60575	410C	Kelsey Hennick (Hockemeyer Lab)
Plate Reader	BioRad xMark		475D	Shuang Zheng (Tjian Lab)
Rotor Ultra Centrifuge	Beckman SW-28, SW-32, SW-55, and NVT-90 rotors	12U-11579	385A	Mary West/Bob Lesch
Rotor Ultra Centrifuge	50.2TI Rotor	11U-4078	510B	Mallory Haggart (Tjian Lab)
Rotor Ultra Centrifuge	70.1 TI Rotor	11U-4830	510B	Mallory Haggart (Tjian Lab)
Rotor Ultra Centrifuge	SW 41 TI Rotor	11U-2672	510B	Mallory Haggart (Tjian Lab)
Rotor Ultra Centrifuge	SW 60 Rotor	11U-2948	510B	Mallory Haggart (Tjian Lab)
Rotor Ultra Centrifuge	SW 32 TI Rotor	11U-2981	510B	Mallory Haggart (Tjian Lab)
Shaker-Large (30,37°C rooms)	Innova 5000-NBS/Eppendorf	ROOM 263 = SI50BJ400031	263	?
Shaker-Large (30,37°C rooms)	Innova 5000-NBS/Eppendorf	ROOM 363 = SI50BJ800032	363	Maren Bell (Botchan Lab)
Shaker-Large (30,37°C rooms)	Innova 5000-NBS/Eppendorf	ROOM 463 = SI50BJ800028	463	Larry Joe (Dillin Lab)
Sonicator-Ultra, high perf.	Covaris S220 with S2 DNA kit, recirculating chiller, microtube prep station, tube holders, training, 2nd yr contract	001843	475D	Claire Darzacq (Darzacq Lab)
Spectrophotometer	Thermo Scientific - Nanodrop 2000 spectrophotometer	C014	230E	Hongfeng Gao (Dan Lab)
Spectrophotometer	Thermo Scientific - Nanodrop 2000C-can use cuvetter	C387	330F	Benjamin Croze (Zoncu Lab)
Spectrophotometer	Thermo Scientific - Nanodrop Spectrophotometer 2000c with cuvette capability	D050	565	Jennifer Blancas (Glaunsinger Lab)
Liquid scintillation counter	Beckman LS6500	7069354	475B	Bob Lesch (Schekman Lab)

Centrifuge Ultra	Beckman Optima L-90K	COL11M12	385	Mary West/Bob Lesch
Centrifuge Ultra	Beckman Optima L-90K	COL11M13	510B	Mallory Haggart (Tjian Lab)
Real time PCR machine	Eppendorf Mastercycler ep realplex: MCEP REALPLEX 2 S SYSTEM W/LAPTOP.	5341-030530	230E	Hongfeng Gao (Dan Lab)
Gel doc Multiplex Fluor&Chemi	BioRad ChemiDoc MP	731BR00493	475D	Bob Lesch (Schekman Lab)
Real time PCR machine	BioRad CFX96	CT003419 base 785BR07845	430E	Mallory Haggart (Tjian Lab)
Real time PCR machine	BioRad CFX96	785BR07841	475D	Mallory Haggart (Tjian Lab)
Cryostat	Thermo NX 70 CryoStar	53534	430A	Kim Long (Kaufer Lab)
Cryostat	Leica CM3050S	047033518	230	Hongfeng Gao (Dan Lab)
Imaging System Infrared	Licor Odyssey-unlimited user license	CLX-0153	475D	Bob Lesch (Schekman Lab)
Microscope inverted epifluor	Zeiss AxioObserver Z1	3834004533	430D	Shawn Shirazi (Kaufer Lab)