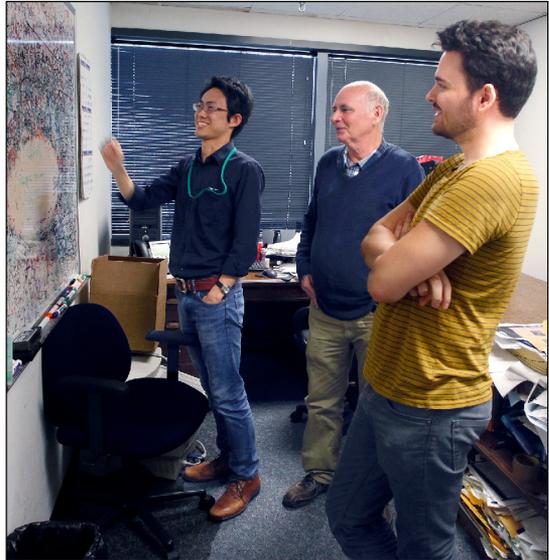


STUDENT ORIENTATION





Jefferson Lab's Accelerator site

WELCOME

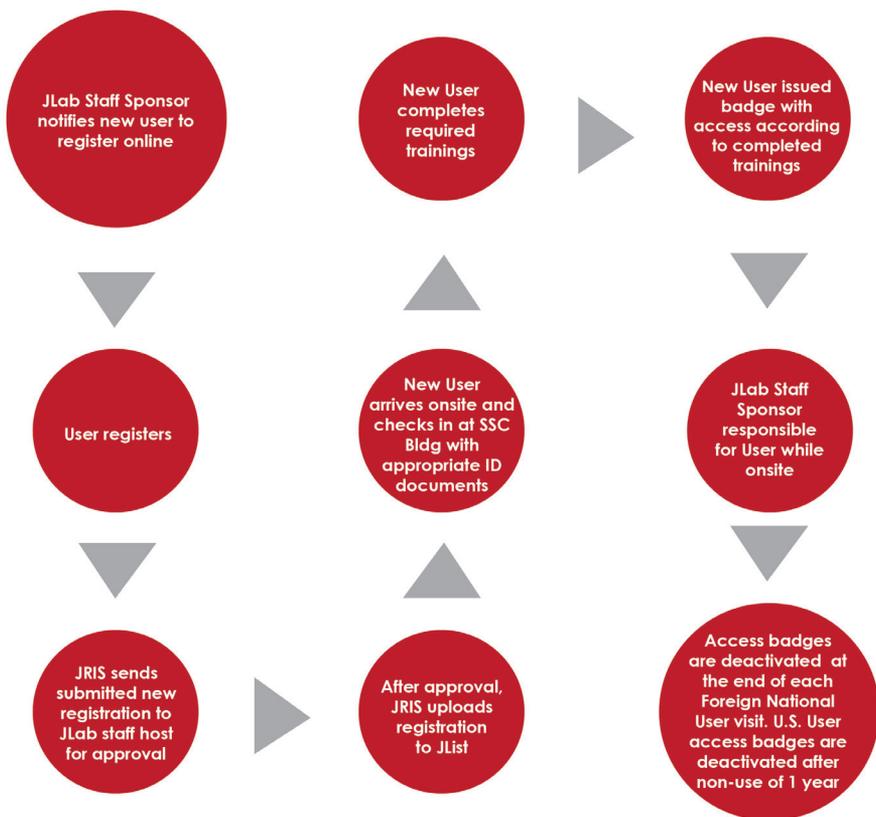
Welcome to Thomas Jefferson National Accelerator Facility (Jefferson Lab), a U.S. Department of Energy Office of Science national laboratory with the primary mission to enable basic research for building a comprehensive understanding of the atom's nucleus by scientists and students worldwide. In addition, the laboratory capitalizes on its unique technologies and expertise to perform advanced computing and applied research with industry and university partners.

Close to 1,600 scientists from more than 230 institutions and 30 countries flock to Jefferson Lab to conduct their research with CEBAF's unique and state-of-the-art facilities. Scientists from more than 90 institutions across 34 states call Jefferson Lab their scientific home. Managing and operating the lab for DOE is Jefferson Science Associates, LLC. JSA is a limited liability company created by Southeastern Universities Research Association and PAE.

At Jefferson Lab, the health and safety of employees, Users, contractors, visitors and the general public is our highest priority. In concert with federal and state regulations, and based on years of experience and benchmarking, the lab has established rules and procedures that protect health and safety. It is lab policy to comply with all environmental regulations and laws. All staff, Users and contractors receive training to ensure they know and follow the lab's health, safety and environmental policies and procedures.

This guide is provided to help you become familiar with the lab and your responsibilities as a visitor. If you have additional questions after reviewing this guide, please consult your escort, sponsor or tour guide.

We want to ensure that your stay at Jefferson Lab is enjoyable, productive and safe!



COMING TO JEFFERSON LAB

Your Jefferson Lab Sponsor

- Your advisor will provide you with the name of your Jefferson Lab sponsor. You will need this information to register online.
- Your Jefferson Lab sponsor is responsible for ensuring that you are aware of and are trained to meet all safety requirements for the areas in

which you will be conducting research and is your contact for all questions you may have regarding your research program at Jefferson Lab.

- Upon your arrival at Jefferson Lab, you must meet with your sponsor to discuss your research activities and to set up regular meetings regarding your program.

Registration for Lab Access

All students requesting access to Jefferson Lab are required to register at <https://misportal.jlab.org/jlabAccess/>.

- Graduate Students – Register as “User-Graduate.”
- High School and Undergraduate Students – 1) Must register at least two weeks prior to arrival; and 2) Register as “High School Student” or “User-Undergraduate,” as applicable.
- Foreign Nationals – Upon arrival, must check in with Jefferson Lab Registration/ International Services at the Support Service Center (SSC), Building 28 reception to validate visa/immigration documentation necessary to obtain Jefferson Lab access. <https://www.jlab.org/hr/jris/id.html>
- For more details regarding registration, visit <https://www.jlab.org/hr/jris/processing.html>.

Requesting Computer Accounts/Office Space

During the registration process you can request a computer user account. This request

DELAYED OPENING/CLOSING

On occasion, Jefferson Lab closes or delays opening for severe weather events. If your visit coincides with an event that could impact lab operations, call your sponsor. If you can't reach your sponsor, call the lab's Main Number (757-269-7100), lab status line (757-234-6236), or check the main webpage www.jlab.org for information on the lab's status.

must be electronically approved by your Jefferson Lab sponsor before your account can be created. Once approved, your computer account can take up to 24-hours to process. Once your account is ready, you will receive an email with instructions on obtaining your user name and temporary password. If you did not request an account during your registration, email jris@jlab.org to request an account.

Office space is available in the CEBAF Center F-Wing and can be reserved at <https://misportal.jlab.org/mis/apps/reservations/index.cfm>. This will require a Jefferson Lab username and password.

JEFFERSON LAB ID/ACCESS BADGE

Monday-Friday
8:15 a.m. - Noon
1 p.m. - 4 p.m.

Obtaining a Jefferson Lab ID/Access Badge

- Once your required training is complete, you can request a Jefferson Lab ID/Access badge from JRIS in SSC, Building 28 (x7598). For general guidance regarding registration, training or badges contact the User Liaison Office located in CEBAF Center, L111 at extension 6388 or via email at Userliaison@jlab.org.

Training

Training is required to access most areas on the Jefferson Lab campus and the accelerator site. Several of these are web-based courses and can be taken at https://www.jlab.org/div_dept/train/webbasedtraining.html.

To receive credit, you must disable your browser's pop-up blocker. Note: If your registration has not been complete when you take a course, your training record will not be updated until your registration is complete.

Below are the requirements specific to areas and populations:

CEBAF Center, Support Service Center (SSC) and the Applied Research Center Building (ARC)

- Environmental Safety and Health Orientation (SAF100)
- Security Awareness for Users (GEN034U)

High School and Undergraduate Students

In addition to the courses above, you must complete:

- Student Safety Training (SAF099). Note: This course is by appointment only. Please contact the science education department at SAF099@jlab.org at least five days before your scheduled



SSC - Badging/JRIS



CEBAF Center - User Liaison/Training

arrival to schedule a class.

- For access to any other areas, please see your sponsor for required training.

Physics Division, Experimental Halls, Accelerator Site

- Rad Worker 1 Class (SAF801C-Web-Based).
- Rad Worker 1 Test (SAF801T) – This is a proctored, no notes exam that is administered at CEBAF Center Front Desk, SSC Front Desk, or Radcon Building 52.
- General Access RWP (SAF801kd) – PDF document accessed via web.
- Physics Division Work Governance (SAF116kd) – PDF document accessed via web.
- Rad Worker 1 Practical (SAF801P)- Provided by Radcon, contact radcontraining@jlab.org.
- Oxygen Deficiency Hazards(ODH) (SAF103) – Web-based open book test.

Each experimental hall also has specific training that is required for access. Please see your sponsor for further details.

Student Activities and Information

- Details on upcoming seminars, workshops and other activities can be found at the Graduate Student and Post-Doc Association Wiki at: https://gspda.jlab.org/wiki/index.php/Main_Page
- To subscribe to the Student and Post Doc mailer and CUGA, contact userliaison@jlab.org.
- Contact the Communications Office at tours@jlab.org if you are interested in a tour.

Medical Insurance

An international accident and sickness insurance plan is available for purchase (not available to U.S. Citizens).

A copy of each applicant's valid immigration documentation is required to process insurance documentation.

Note, this plan provides travel insurance benefits for individuals traveling outside of their home country. It does not constitute comprehensive health insurance coverage and does not satisfy a person's

individual obligation to secure the requirement of minimum essential coverage under the Affordable Care Act (ACA).

For complete details visit:
<https://www.jlab.org/hr/jris/insurance.html>

What To Do In An Emergency

If you are involved in or see a medical or other type of emergency, report it immediately by calling 911. Then, call Jefferson Lab security at 757-269-5822 (x5822 if using a lab phone) to let security personnel know that you have called 911.

If you have an accident/injury (no matter how small) that occurs during normal business hours (M-F 8 a.m.- 5p.m.) you must report it immediately to your Jefferson Lab staff sponsor and Occupational Medicine at x7539, or by pager at 757-584-7539. If an accident occurs after normal business hours and you feel you need medical care, there are emergency rooms and urgent care facilities in the area.

Emergency Care

An emergency room visit can be expensive. Evaluate the accident/injury to determine if it is a critical situation or if

24-HOUR EMERGENCY CARE

**Port Warwick II
Sentara Emergency Center**
11803 Jefferson Avenue
Newport News, VA 23606
757-736-9800

**Riverside Hospital
Emergency Room**
500 J. Clyde Morris Blvd.
Newport News, VA 23601
594-3080

**Mary Immaculate Hospital
(MIH) Emergency Room**
2 Bernardine Dr.
Newport News, VA
886-6000

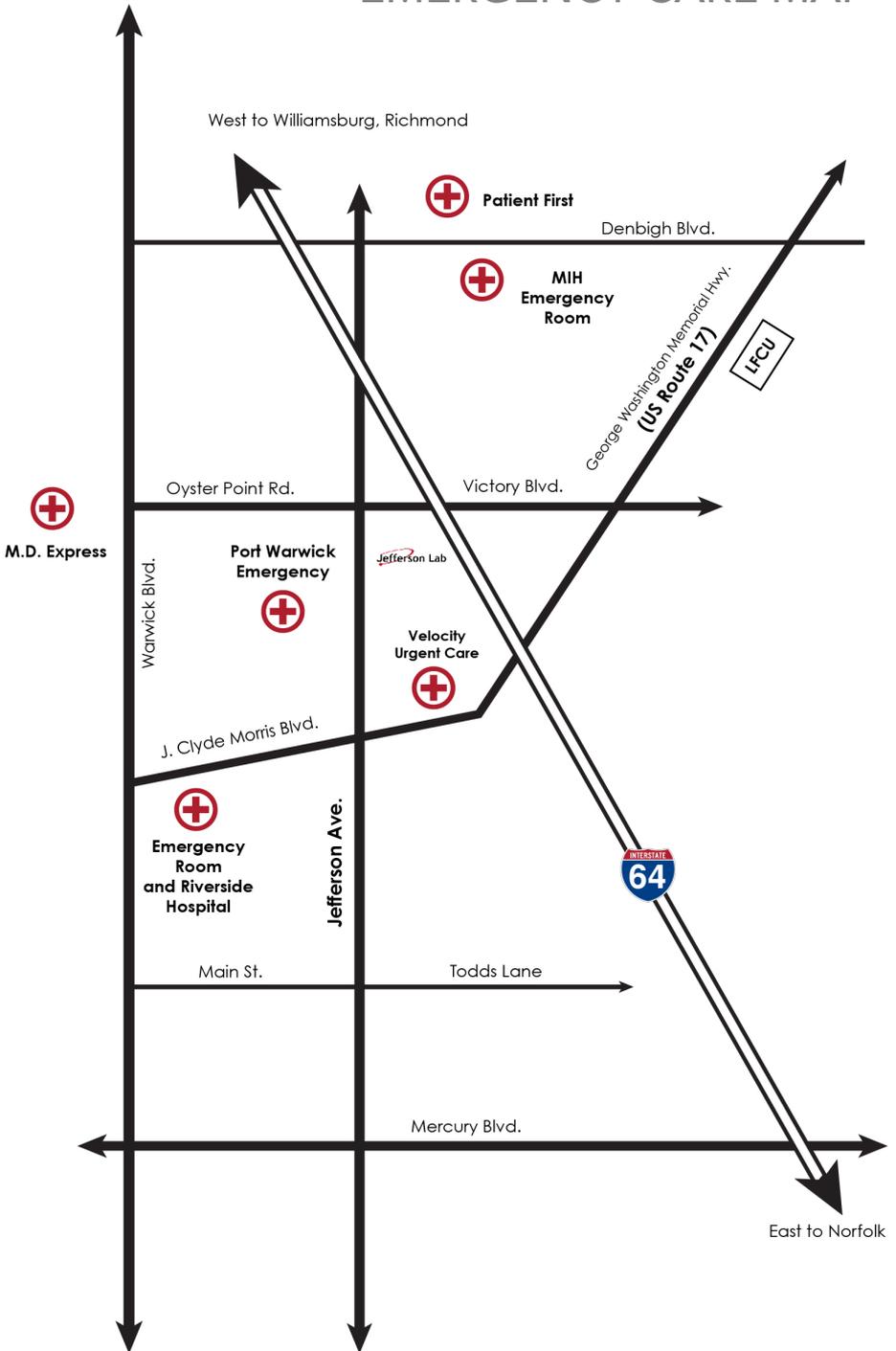
an injury can be handled at an urgent care facility.

There are two urgent care facilities near Jefferson Lab:

M.D. Express Urgent Care
12997 Warwick Blvd.
Newport News, VA 23602
757-369-9446

Velocity Urgent Care
747 J. Clyde Morris Blvd.
Newport News, VA 23601
757-772-6121

EMERGENCY CARE MAP



ACCESS TO JEFFERSON LAB

There are areas in some buildings designated as General Access Areas, meaning they are accessible to all personnel and the public (except on federal holidays and during lab shutdown periods). These areas include:

- CEBAF Center (Bldg. 12) is the lab's main administration building. The atrium, cafeteria and auditorium are open 8 a.m. to 5 p.m. Monday through Friday.
- The SSC (Bldg. 28) and ARC buildings are open to the invited public through their main lobby doors from 8 a.m. to 5 p.m. Monday through Friday. The ARC building is owned by the City of Newport News and is

managed by Jefferson Lab.

- The Jefferson Lab campus provides several general access areas and all campus entry roads are open 6:30 a.m. to 6:30 p.m. Monday through Friday. Vehicle entrances and exits are limited during the remaining hours, and during weekends and holidays.

Limited Access Areas

All remaining Jefferson Lab facilities and areas are considered limited access; students are required to complete the necessary training to access these areas. (See page 4-5)

SECURITY AT JEFFERSON LAB

- A Jefferson Lab ID/access badge is required to enter a Jefferson Lab facility without an escort.
- A Jefferson Lab ID/access badge allows you access to only those areas to which you have been assigned or for which you have received training.
- Visitors without a badge are

required to sign a registration log when visiting the CEBAF Center, ARC and SSC buildings, the Computer Center and the Test Lab.

- Visitors taking a guided tour do not need a security badge, but need to show their lab ID or personal ID.
- To receive a Jefferson Lab badge, you must complete



Jefferson Lab security guard

required training and citizenship or immigration document validation. (See pages 2-5)

- If issued a badge, it is your responsibility to protect it and comply with all rules.
- Keep your badge with you at all times while on site and present it when requested.
- Report lost or stolen badges to your sponsor or escort.
- Do not allow people you do not know to enter Jefferson Lab facilities.
- Access a Jefferson Lab computer only if it has been assigned to you. Computers for general use are located on the second floor atrium at CEBAF Center.
- Wifi service for visitors is available onsite. Passwords may be obtained at the front desk at CEBAF Center.

PROHIBITED ARTICLES

Weapons, explosives, or other dangerous instruments or materials likely to produce substantial injury or damage to persons or property are prohibited. Only law enforcement officials are permitted to bring or carry firearms at Jefferson Lab.

Also prohibited are:

- Controlled substances, illegal drugs (and associated paraphernalia).
 - Open containers of alcoholic beverages.
 - Other items prohibited by law.
- No government-owned property or material may be taken offsite without an approved property pass.



Users Group student poster session.

VEHICLES AT JEFFERSON LAB

- You must have a valid driver's license, vehicle registration, insurance and vehicle safety inspection to drive on the Jefferson Lab campus.
- Follow all traffic signs when driving and park only in designated areas.
- The passing of any vehicle is prohibited on campus.
- Obey posted speed limits.
- Always use seatbelts when driving or riding in vehicles at Jefferson Lab.
- Visitor parking spaces are for visitors only. No one (Users, staff, contractors, etc.) with a Jefferson Lab badge is allowed to park in visitor spaces.
- Handicap permits are required to park in handicap spaces.

KEY PHONE NUMBERS & EMAIL ADDRESSES

| | | |
|---|---------------|-------------------------|
| IT Division Help Desk | 757-269-7155 | helpdesk@jlab.org |
| Main Number | 757-269 -7100 | jlabinfo@jlab.org |
| Medical Services | 757-269-7539 | medserv@jlab.org |
| Radiation Control <i>(Practical/Dosimeter)</i> | 757-269-7219 | radcontraining@jlab.org |
| Security/Emergency | 757-269-5822 | |
| Events Services <i>(Meeting Rooms)</i> | 757-269-6368 | eventservices@jlab.org |
| Tours | 757-269-7617 | tours@jlab.org |
| Training Manager | 757-269-7598 | training@jlab.org |
| User Liaison/ Student Affairs | 757-269-6388 | userliaison@jlab.org |
| SSC Receptionist/JRIS <i>(Foreign Nationals)</i> | 757-269-7598 | jris@jlab.org |

JEFFERSON LAB SITE MAP

① Support Service Center (SSC)

The SSC is home to the lab's human resources, finance, procurement, facilities management and science education departments. International services and badging for staff and users are also located here.

② SURA Residence

Researchers and visitors may rent rooms at the Residence Facility, which is operated by Southeastern Universities Research Association. More information can be found here: <http://sura.org:3283/resfac/accomodations/>

③ CEBAF Center

CEBAF Center is Jefferson Lab's main administration building. It provides conference, meeting and office space. A cafeteria serving breakfast and lunch is open Monday through Friday from 7 a.m. to 2 p.m. CEBAF stands for Continuous Electron Beam Accelerator Facility, the lab's original name and the name of its accelerator.

④ Experimental Equipment Lab (EEL)

The EEL is where specialized equipment for experiments is assembled and tested.

⑤ Test Lab

The Test Lab is home to Jefferson Lab's Superconducting Radiofrequency Institute, a world-leader in superconducting radiofrequency (SRF) accelerator technology and capabilities.

⑥ Technology and Engineering Development building (TED)

The Technology and Engineering Development building is a state-of-the-art facility where research in nuclear physics, accelerator science, applied nuclear science and technology, and advanced instrumentation is conducted.

⑦ ESH&Q Building (Environmental, Safety, Health & Quality)

The lab's ESH&Q staff works out of this building. Staff, Users and contractors needing access to Radiologically Controlled Areas must seek access and permanent or temporary dosimetry through the Radiation Control Department.

⑧ Guard House

The lab's security staff is based here. It is also the main access point to the accelerator and the experimental halls.

⑨ Hall A

Hall A is configured with two, moveable High Resolution Magnetic Spectrometers for precise measurements of the inner structure of nuclei. The hall is also used for large-installation experiments.

⑩ Hall B

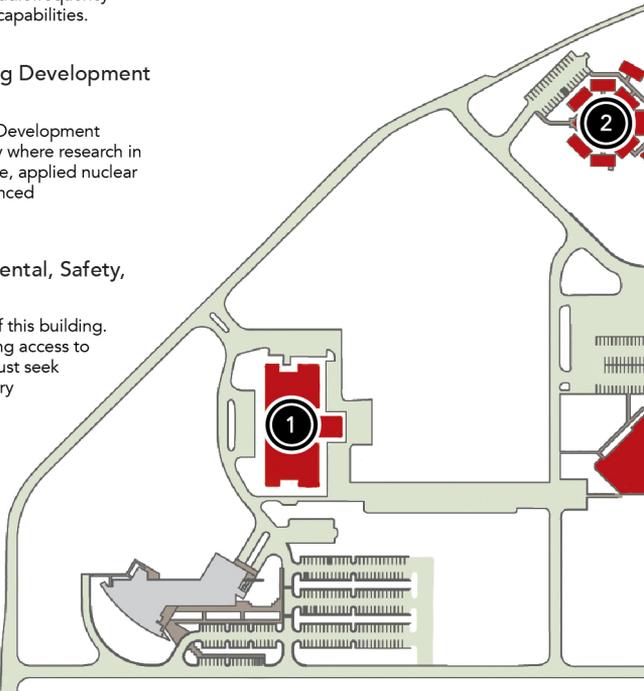
Hall B houses the CEBAF Large Acceptance Spectrometer (CLAS 12), brought online in 2017. Layers of spectrometers surround the target assembly, allowing researchers to measure many reactions simultaneously over a broad range of angles.

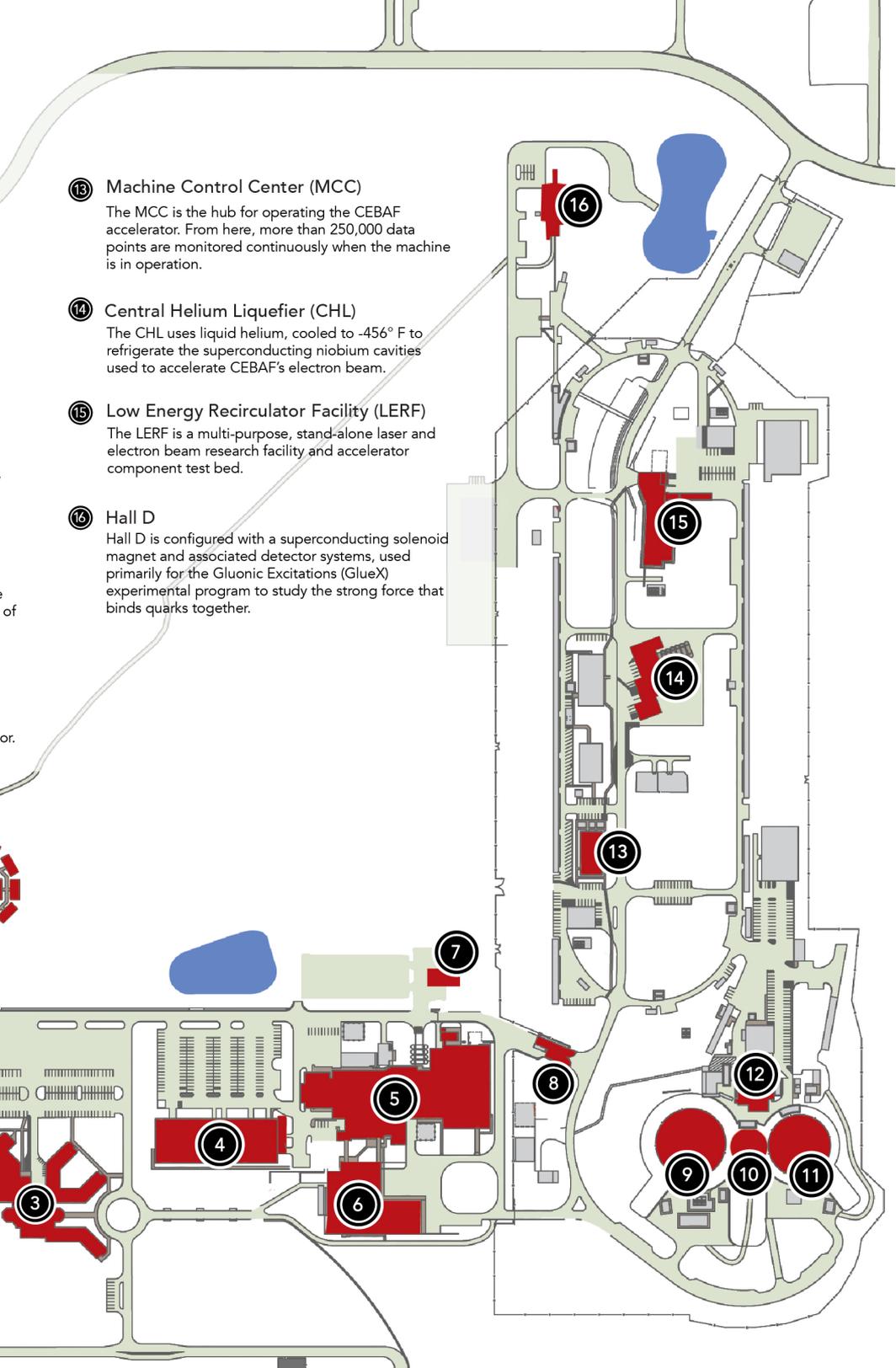
⑪ Hall C

Hall C is equipped with the Super High Momentum Spectrometer (SHMS), brought online in 2017, and the existing HMS. It is used to take precise measurements the inner structure of protons and nuclei using the maximum available beam energy and current.

⑫ Counting House

This building houses the control rooms for Halls A, B and C, and meeting and office space on its second floor.



- 
- 13 Machine Control Center (MCC)
The MCC is the hub for operating the CEBAF accelerator. From here, more than 250,000 data points are monitored continuously when the machine is in operation.
- 14 Central Helium Liquefier (CHL)
The CHL uses liquid helium, cooled to -456°F to refrigerate the superconducting niobium cavities used to accelerate CEBAF's electron beam.
- 15 Low Energy Recirculator Facility (LERF)
The LERF is a multi-purpose, stand-alone laser and electron beam research facility and accelerator component test bed.
- 16 Hall D
Hall D is configured with a superconducting solenoid magnet and associated detector systems, used primarily for the Gluonic Excitations (GlueX) experimental program to study the strong force that binds quarks together.

of

or.



Learn more about Jefferson Lab by visiting www.jlab.org, by sending an email to jlabinfo@jlab.org, or by calling 757-269-7100.

Jefferson Lab

Thomas Jefferson National Accelerator Facility is managed by
Jefferson Science Associates, LLC for the
U.S. Department of Energy's Office of Science

