ICTAS Facilities Building Orientation

About ICTAS

ICTAS brings together scientists to work on cutting-edge projects at the intersections of engineering, humanities, and the physical, life, and social sciences.

To support this interdisciplinary research, we

- Provide state-of-the-art facilities where researchers from different departments can work together collaboratively.
- Offer seed funding for high-risk, high reward projects in their early stages, and sustained financial support as successful projects mature.
- Provide administrative support for proposal development and other initiatives.
- Support interdisciplinary graduate education through the ICTAS Doctoral Scholars program.

These activities, and many others, create an ecosystem where innovative ideas can thrive.

Kelly Hall

Kelly Hall is the headquarters for ICTAS operations and is also home to Biomedical Engineering and Mechanics (BEAM).

ICTAS II

ICTAS II has been recognized by the green Building Certification Institute as LEED (Leadership in Energy and Environmental Design) certified to the Gold Level.

ICTAS - CRC

ICTAS – CRC is designed to minimize interference to instruments from environmental factors such as building vibration and stray electromagnetic fields. This building is home to the ICTAS Nanoscale Characterization and Fabrication Laboratory (NCFL).

ICTAS Facilities Personnel

Ross Verbrugge
Director of Facilities
(540) 553-5966
rossv@vt.edu

Dallas StClair
Lab and Database Coordinator
(540) 750-3828
dstclair@vt.edu

Brett Smith
Facilities Coordinator
(540) 553-5511
brett8@vt.edu

TBD
Lab Facilities Manager

Access

- Your Supervisor/PI must submit an access request.
- Access requests are processed as they are received. Requests may take up to 3 business days.
- Faculty, Staff, and Grad Students may have 24/7 access. If approved, Undergraduates, Volunteers, and Visiting Scholars may have access Monday - Friday, 8:00 am – 5:00 pm only.
- If you have problems with access, please contact ictasbld@vt.edu.

Space Assignments

- Lab Space – requests for lab space should be directed to the ICTAS Director of Facilities.

- Office Space
  - Faculty/Staff – individual offices assigned only if full-time position within ICTAS or BEAM.
  - Postdocs/Grad Students – Where no health and safety issue is present, first assigned space within the lab. Where health and safety concerns are present or no space is remaining in the lab, space assigned in group office.
    - *Please note: Space is assigned by ICTAS Facilities; please do not take space without being assigned. You risk your personal items being identified as abandoned, and placed in trash.*
  - *Desk space is not assigned to undergraduates.*

Relevant University Policies

- Heat/AC – University initiative on sustainability/energy conservation guides building temperature settings.
  - ICTAS cannot change temperatures between 68° and 72° unless there is a specific research need.
  - Please dress in layers.
  - Report temperature issues to ictasbld@vt.edu.
- Space Heaters are <u>not</u> permitted in ICTAS facilities.

Relevant University Policies

- Bikes – no bikes allowed in ICTAS facilities
  - Please use bike racks located outside of buildings.
  - All bikes should be registered (ref. www.facilities.vt.edu/bikereg)
  - Bikes chained to handicap access areas can be impounded by Parking Services.
  - For more information please visit www.facilities.vt.edu/ot/alternative.bike.asp

Relevant University Policies

- Smoking
  - No smoking at any time in the facilities.
  - Smoking is not allowed within 25 feet of doorways.
  - Designated smoking areas are located on the south end of the building across from McBryde for Kelly Hall, at any ash urn located at ICTAS II, and near the picnic table in front of ICTAS@CRC.
  - For more information please visit www.policies.vt.edu.1010.pdf

Furniture & Equipment

- Furniture & Equipment managed by ICTAS
  - Do not remove from facility or alter without approval.
  - Office furniture should not be moved into the labs.
  - No cloth chairs are allowed in labs.
- Other equipment – Equipment owned by other units or departments is the sole responsibility of said unit or department.
  - Must provide own maintenance and inventory control.
- Equipment use – Use only equipment authorized for your use.
  - Misuse or damage could result in you being help financially responsible.

Renovations and Maintenance

- Any renovation or alteration to the building must go through ICTAS facilities staff.
  - Includes additions of electricity, gases, air, etc.
  - Renovations considered program-specific must be funded by program.
  - Send detailed request (with drawing as appropriate) to ictasbld@vt.edu.
- Maintenance requests (i.e. broken doors) should be sent to ICTAS facilities staff at ictasbld@vt.edu.

- Break rooms are here for your convenience and use; please be considerate of others.
  - Occupants are responsible for cleaning and maintaining.
    - Do not put food in the sinks and place all trash/food in trash receptacles.
    - Wipe off all tables, sinks, and counters; clean microwave after use.
  - Keep all furniture in the room.
  - ALL items not labeled AND dated are subject to disposal if left in drawers, cabinets, or fridges.

ICTAS does not check and/or clean refrigerators.

Common Use Spaces

- Hallways – Please keep hallways and doors free from furniture, equipment and debris.

- Limit posting flyers to white boards at the end of the halls and break rooms. Please do not use tape on the walls at any time.
  - Due to fire code, notices should not be posted on laboratory doors.

- Vending machines are located on the first floor of Kelly Hall and ICTAS II, and on the second floor at CRC.

Common Use Spaces

- Loading Areas
  - There is no loading dock at Kelly Hall or ICTAS-CRC. Lifts and carts are provided for your convenience.
  - A loading dock with a leveler is available at ICTAS II.
  - To operate roll top doors, use buttons to the left of each door.
  - Please close roll top doors when delivery is complete.
  - Delivers to ICTAS-CRC must be schedule so that alarms can be deactivated.

- Carts and lifts are for temporary use only.
  - Do not keep in labs or offices; do not remove from building or bring other carts in from outside – return immediately.

Common Use Spaces

- Do not leave deliveries in loading area.
  - ICTAS assumes no responsibility for theft or damage of any delivery left in the loading area.
  - Request inside delivery for any item that you cannot lift. ICTAS facilities staff can provide limited support if available and scheduled in advance.
- All packaging materials (crates, boxes, wrap) must be broken down and delivered to waste marshaling.
  - Custodial staff is not responsible.
  - Do not keep boxes or packaging materials in labs or offices.
  - Keep all trash, crates, and boxes within waste marshaling area.

Conference Room Assistance
Administrative Staff

ICTAS @ Kelly Hall

Shelley Johnson
Executive Assistant
(540) 231-1929
shelleyj@vt.edu

Erin Shibley
Admin. Support Specialist
(540) 231-2597
elshib9@vt.edu

BEAM & CIB @ Kelly Hall

Kristie Verniel
Associate Program
Manager-BEAM
(540) 231-8191
kristie@vt.edu

Kayla Chaffin
Operations Planning
Coordinator- CIB
(540) 231-1617
chaffin@vt.edu

ICTAS II

Vicki Kaylor
Administrative Assistant –
ICTAS II
(540) 231-4303
vickik@vt.edu

ICTAS @ CRC

Susette Sowers
Administrative Assistant – NCFL
(540) 231-0466
susette@vt.edu

Kelly Hall Conference Rooms

Small Conference Rooms

- 221, 241, 321, 341, 421 & 441 (max. occupancy 18)
- Available for reservation M-F, 8am – 5pm
- Standard 12 chairs available, if more are needed email ictasbld@vt.edu at least 5 days in advance.
  - *If less than 5 days notice, your request may not be fulfilled

Large Conference Rooms

- Seminar Room 310 (max. occupancy 80).
- Room 210 (max occupancy is 30).
- Both rooms require reservation agreements and post event checklists.
- *If you are unable to attend, you may designate someone that understands the process and policies required to reserve the space to return the key.*

Kelly Hall Conference Rooms

- ICTAS Managed
    - Rooms 221, 241, 421, 210, & 310
    - Contact for reservation: ictasreservations@vt.edu 231-2597

Please note: *These rooms are locked 24/7 and must be reserved in order to use. Please check the key out from suite 410 in Kelly Hall. If meeting lasts past 5 p.m., please return the key to drop box outside of suite 410.*

Kelly Hall Conference Rooms

- BEAM Managed
    - Rooms 321 & 341

    Kristie Verniel, kristie@vt.edu, 231-8191

    Backup: Kayla Chaffin, chaffin@vt.edu, 231-1617

- CIB Managed
    - Room 441

    Kayla Chaffin, chaffin@vt.edu, 231-1617

    Backup: Kristie Verniel, kristie@vt.edu, 231-8191

ICTAS II Conference Rooms

- 3 conference rooms – 164, 224 & 324
  - Available for reservation M-F, 8am – 5pm

- Room 164
  - 16 chairs available

- Rooms 224 & 324
  - 12 chairs available

- Contact for reservations:
  - Vicki Kaylor (ICTAS II Suite 130): vickik@vt.edu, 231-4303
  - Backup: Erin Shibley, elshib9@vt.edu, 231-2597

ICTAS-CRC Conference Rooms

- 3 conference rooms – 2013, 2005 & 2006
- Room 2013 (max. occupancy is 88)
  - 25 chairs with tables
- Rooms 2005 & 2006
  - 12 chairs available
- Contact for reservations:
  - Susette Sower: susette@vt.edu, 231-0466
  - Backup: Erin Shibley, elshib9@vt.edu, 231-2597

- Kelly Hall (325 Stanger St):
    - ICTAS Admin. Mail Code (MC): **0193**
        - All other Kelly tenants: **0196**
        - Tenant mailboxes are on the fourth floor across from room 421.
        - **Packages**
            - Work related: Lois Hall's office (410A)
                - Remember to sign the log.
    - BEAM & CIB: **MC 0298**
        - If you fall into a different lab than previously listed please see Kristie Verniel for BEAM or Kayla Chaffin for CIB, for more information concerning your mail and packages.

- ICTAS II (1075 Life Science Circle):
    - Mail Code: **0917**
    - Tenant mailboxes are located on the first floor room 117
    - Packages are located on the first floor room 117.
        - Remember to sign the log.
- ICTAS-CRC (1991 Kraft Drive):
    - Mail Code: **0905**
    - Tenant mailboxes are located in room 1001
    - Packages are in the first floor main office 1001.
    - Hume Center – Mail Code **0713**

ICTAS IT Personnel

Andrew Kirkpatrick
IT Manager
(540) 267-5504
ak@vt.edu

Nick Clements
Desktop Support
(540) 808-3678
nacleme@vt.edu

Clara Enriquez
Desktop Support
clara3@vt.edu

ictasit@vt.edu   www.it.ictas.vt.edu

Lab Policies

- **University Chemical Hygiene Plan** (OSHA Title 29 CFR 1910.1450)
- **All labs with any chemicals or biologicals must have a chemical hygiene plan in place and each lab member must sign!**

- **Disposal of Empty Chemical Containers**
  - Containers should be triple rinsed with water
  - Labels should be removed or obliterated completely
  - Dispose of in cardboard boxes or broken glass containers
  - **Do NOT place in regular trash or recycling!**
  - **Do NOT leave in loading dock area!**

- **Safety Data Sheets** (formerly known as Material Safety Data Sheets)
  - Keep current for all chemicals and gases used in laboratories
  - Movement of chemicals requires SDS in each location
  - This is the responsibility of the PI and lab group!

Lab Policies

- **No food or drink in the labs at any time**
  - Chemicals, nanomaterials, and biologicals volatilize and can contaminate foods stored in the lab
  - Drinks are easily spilled onto equipment and computers
  - Food must never be stored in the same refrigerator as chemicals or biological samples

- **No open-toed shoes in labs**

- **No gloves should be worn outside of the lab!**
  - Please do not touch public/common areas (i.e. door handles, water fountains, etc.) with gloved hands! This could contaminate common areas

- **Do NOT place dry ice in sinks!**
  - This will cause the sink to crack and the pipes to break. The lab group will be held responsible for the cost of repair or replacement

Lab Policies

- Work with chemical or physical hazards (high voltage, mechanical hazards not known to be intrinsically safe) and any other work that might prove immediately dangerous to life and health (IDLH) **shall not be conducted alone in any Virginia Tech laboratory**

- *ALL* laboratory work should be conducted with a partner, a co-worker, or in proximity to others, in case of emergency

Infection Control and Biosafety

Use of biologicals and infectious agents requires IBC approval

- The Infection Control/Biosafety Plan is designed for the following:
  - To protect all laboratory personnel from exposure to biological agents that have the potential to cause disease in humans
  - Prevent environmental contamination
  - Protect experimental materials
  - Specify the policies, procedures, and requirements for safe handling and use of biological agents

Animals in Research Facilities

- No pets other than service animals allowed in facility (www.policies.vt.edu/5000.pdf)

- No research animals may be kept in facility longer than 24 hours

- Reference: http://www.policies.vt.edu/animalresearch.php

ICTAS Lab Safety

ICTAS Facilities provides:

-Safety eyewash in each lab directly inside doorway

-Safety showers

-First aid kits in each lab

-Safety Data Sheet Binder (lab PI responsible for keeping up to date)

-Chemical Hygiene Plan

-Infection Control/Biosafety Plan (if applicable)

RO Water and Point of Use Systems – Kelly Hall

- RO (5 Mohm, UV sterilized, 0.2 Micron postfilter) water throughout building – piped directly to labs

- POU systems are located in both 238 and 338 ICTAS

- POU system is capable of 18Mohm water

- Access restricted. Contact ictasbld@vt.edu for access or information

DI Water Systems – ICTAS II

- DI quality (15 Mohm, UV sterilized, 0.2 Micron postfilter) water throughout building – piped to each lab

- Attachments to any system must have check valve to prevent contamination of water supply

Autoclaves and Glassware Washers

- **Kelly Hall – Located in 238 and 338**
- **ICTAS II – Located in 262 and 362**

- **Kelly Hall – 2 Getinge autoclaves, 2 Lancer glassware washers**
  - Autoclave and glassware washing service provided by ICTAS Lab Database Coordinator (Dallas)
  - Contact ictasbld@vt.edu to request service Monday – Friday, 9AM-3PM
  - After-hours access is restricted to 2 people per lab group

- **ICTAS II – 2 Steris autoclaves, 2 Lancer glassware washers**
  - No autoclave or glassware washing service provided at this time

- Mandatory autoclave training from Lab Facilities Manager and EHS is required before use
- Consumables are program specific
- Log books must be used

Solid Wastes

- **Regular Trash – anything that you would throw away at home**
  - Paper towels, pipette wrappers, paper, etc.
  - Housekeeping staff will **not** remove trash containing gloves, pipette tips, etc.
- **Biohazard Bags – any non-sharp item contaminated by biologicals**
  - Gloves, plates, tissue samples, etc.
- **Blue Chemical Bags – any non-sharp item contaminated by chemicals**
  - Gloves, agarose gels, etc.
- **Sharps Containers – any item that could create a hole in a plastic bag!**
  - Pipette tips, serological pipettes, needles, razor blades, scalpels, etc.
  - Red sharps containers = biological sharps disposal
  - Plastic or glass hard-sided containers (i.e. empty chemical bottles) = chemical sharps disposal

Waste Disposal

Regulated Medical Waste (Biological)

- **All biological waste must be autoclaved (including sharps containers)**
  - Autoclaved waste should be placed in cardboard regulated medical waste boxes (including sharps containers)
    - EHS will not pick up sharps containers if they are not packaged in regulated medical waste boxes
  - Regulated medical waste boxes should be sealed with tape and labeled appropriately when 2/3 full
    - Waste packaging demonstrated during training
    - Tape and labels provided in autoclave rooms
  - EHS regularly scheduled pick-ups:
    - Kelly Hall – Monday mornings by 9:00AM
   - ICTAS II – Monday mornings by 10:00AM

Chemical Waste Disposal

- **All chemical waste must be labeled as hazardous**
    - Chemical waste should be placed in EHS provided blue bags in a secondary container with a waste label attached
        - Chemically contaminated sharps containers should be either thick-walled plastic or glass and should have a waste label attached
    - Waste removal should be requested using the EHS online safety management system
        - Information is needed for each waste container
            - Composition of waste, amount, pH, container type
        - Once submitted, EHS will pick up at lab of origin
    - Chemicals must always be capped
        - Do not leave uncapped chemicals in fume hoods!!

In Case of Emergency

- Emergency Action Plan for all ICTAS facilities available
  - In chemical hygiene plan and upon request
- Exit signs posted throughout building
- Ensure your supervisor/PI has emergency contact information on file
- Ensure all your staff/students are on space assignments

- Dial 911 for any life threatening emergencies
  - Cell phones users should specify location on campus
    - Cell phones may route callers to Blacksburg PD, Christiansburg PD, or Montgomery County PD
  - Lab and office phones are directed to Virginia Tech PD
  - Just dial 911 – no other number is needed to "dial out"

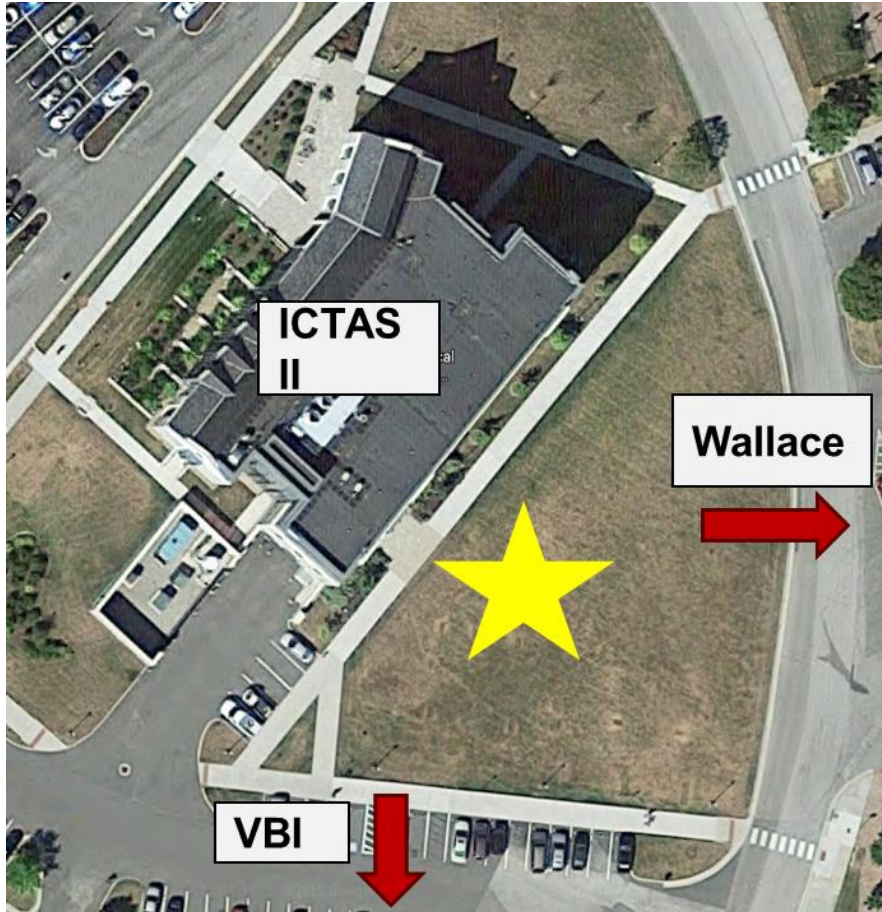# Emergency Preparedness
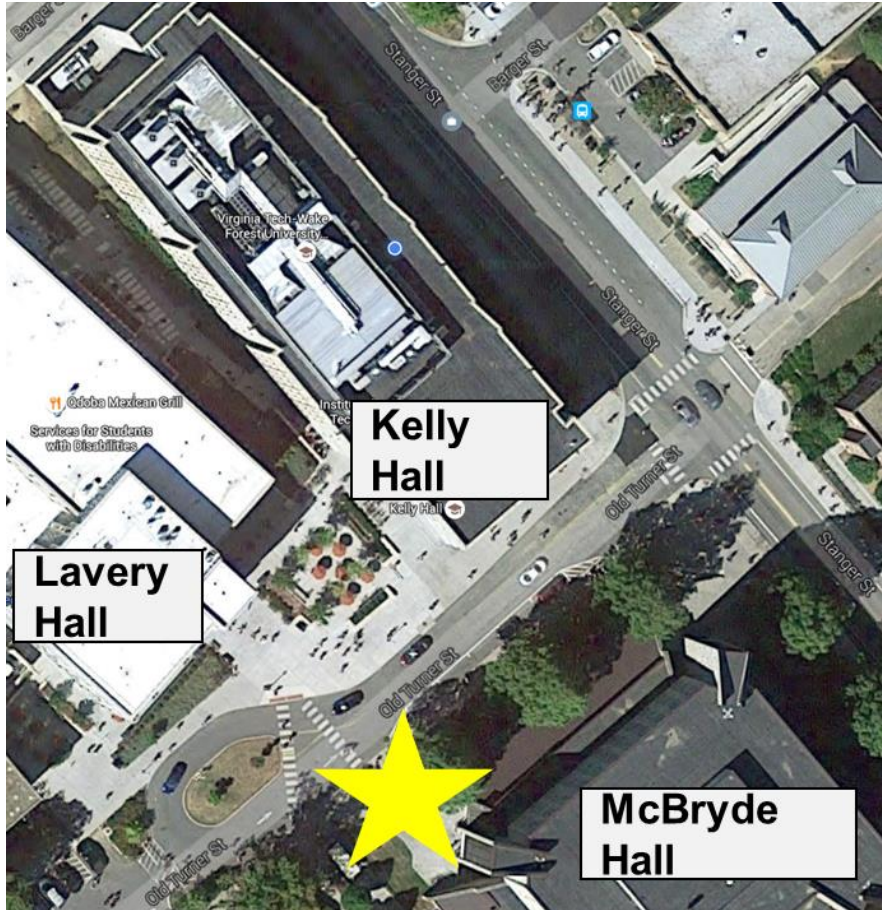
Kelly Hall

- **Evacuation**
  - In the event of a fire or other emergency requiring evacuation, proceed to the emergency gathering point and check in with someone from your lab group or Facilities
    - Gathering point between McBryde and Norris

- **Shelter in Place**
  - In the event of a severe weather emergency (i.e. tornado), move to interior spaces away from windows
    - 1st floor is safest location
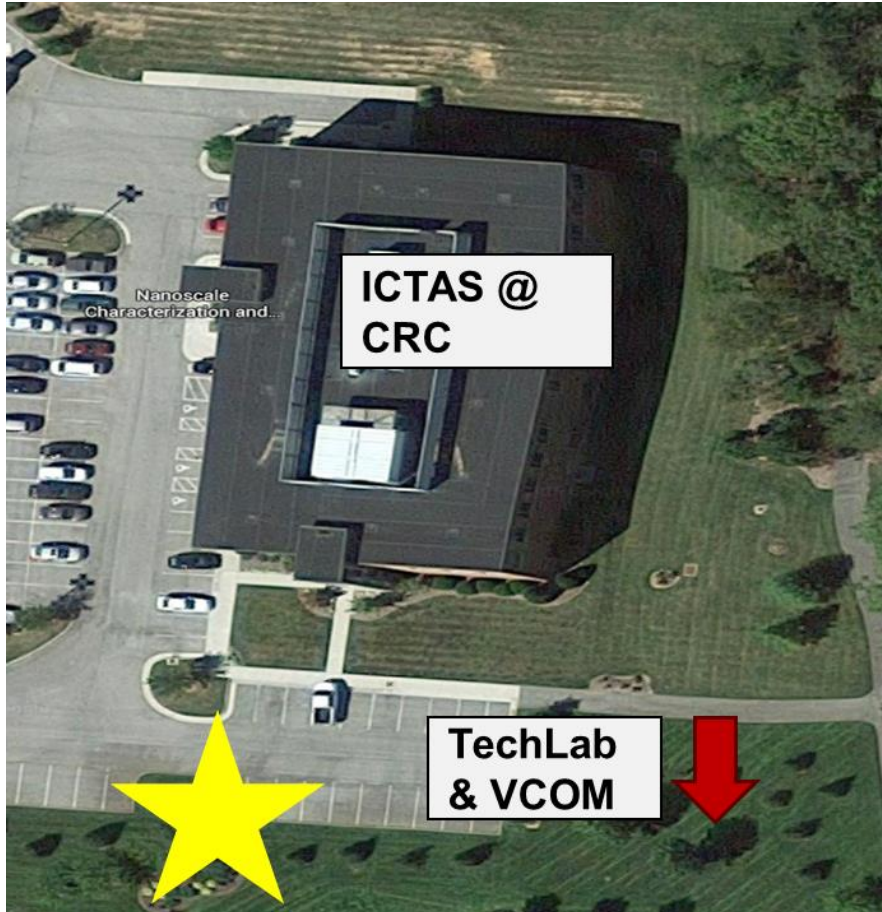
Emergency Preparedness

ICTAS II

- **Evacuation**
  - In the event of a fire or other emergency requiring evacuation, proceed to the emergency gathering point and check in with someone from your lab group or Facilities
    - Gathering point is the large grassy area at employee entrance near Wallace Hall

- **Shelter in Place**
  - In the event of a severe weather emergency (i.e. tornado), move to interior spaces away from windows
    - 1st floor is safest location

Emergency Preparedness

ICTAS – CRC

- **Evacuation**
  - In the event of a fire or other emergency requiring evacuation, proceed to the emergency gathering point and check in with someone from your lab group or Facilities
    - Gathering point is the large grassy area nearest to TechLab and VCOM

- **Shelter in Place**
  - In the event of a severe weather emergency (i.e. tornado), move to interior spaces away from windows
    - 1st floor lab corridor
    - 2nd floor conference rooms