

## Safety Training Acknowledgement

I have received and read a copy of the Facility safety guidelines.  yes  no

I am aware that certain medical devices (e.g. pacemakers) may be adversely affected by close proximity to high magnetic fields.  yes  no

While there are no credible studies showing any adverse health hazards from strong magnetic fields, I agree to accept any such risks by working in the Facility.  yes  no

I am aware that strong magnetic fields could negatively affect certain personal items (e.g. credit cards, watches).  yes  no

I understand that tools and other metallic objects can be captured by the magnetic field and fly toward the magnet and agree to keep such objects away from the magnets.  yes  no

I understand that cryogenic liquids can cause severe injuries and will not handle such liquids unless I have received specific training to do so.  yes  no

If I make use of the wet laboratory, I agree to keep the area clean and follow good general laboratory safety guidelines as I would in my own lab.  yes  no

I agree to contact Facility personnel in any emergency or if I notice anything abnormal going on in the laboratory (e.g. water leaks, strange noises). I will immediately leave the lab if I have any safety concerns.  yes  no

I acknowledge that I have asked Facility personnel about any additional safety questions or concerns I may have and that such questions have been answered to my satisfaction.  yes  no  
 no questions

I understand that failure to abide by good safety practices may result in the suspension or loss of my access to the NMR Facility.  yes  no

### Investigator Information

Investigator Name: \_\_\_\_\_

PI/Lab Name: \_\_\_\_\_

Investigator

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## CCOM NMR Facility Safety Guidelines

*Do not approach to the magnets if you wear electronic and/or mechanical medical implants* such as a cardiac pacemaker, neurostimulator, or other metal implants. The strong magnetic field nearby the magnets might cause the malfunctions of your medical implants and personal safety.

*Do not bring personal magnetic objects close to the magnets.* These could include credit cards, personal identification cards, watches, cameras, bus passes, cell phones, memory sticks, etc. Despite our use of shielded magnets, the strong magnetic field nearby the magnets might wipe out your credit information and damage your personal items.

*Do not bring metal objects or mechanic tools close to the magnets.* Metal objects captured by the magnetic field can fly toward the magnet at extreme velocity. This could lead to instrument damage, and larger objects could cause a magnet to quench. Magnetic objects can also become stuck to the magnet and may be difficult or impossible to remove.

*Call the NMR facility staff if you notice something abnormal* such as leaking of cooling water, presence of strange noises, flashing of magnet warning lights, leaking of compressed air, etc. The facility staff phone numbers are listed on the bulletin board just inside the elevator and between Liping Yu's and Andrew Fowler's offices. If the staff is unreachable at the time, please call Rams or Ernie Fuentes.

*Exit the facility immediately in case of emergency* such as a magnet quench. The liquid helium used to keep the magnet in a superconducting state will rapidly vaporize during magnet quenching, leading to increase in volume more than 700 fold and causing the displacement of atmosphere. After exiting, call the facility staff and/or Rams/Ernie.

*Pregnant women need to decide for themselves whether or not to go near the magnet.* There are no reliable studies that show any biological health hazards from exposure to strong magnetic fields. However, there are very few studies on how magnetic fields may affect development.

*Proper training is required to handle liquid cryogenes.* Currently, only the facility staff including Paul Rogers, Andrew Fowler, and Liping Yu are trained.

*Maintain wet laboratory cleanliness and follow general laboratory safety guideline.* Here inside the NMR facility, we have a small collection of chemicals, glassware, and general lab supplies for basic sample preparation needs. Any person in using the lab should keep it clean and follow general laboratory safety guideline.

### **Emergency Contact Numbers**

Liping Yu	4-3172 (office)	224-723-2547 (cell)	
Andrew Fowler	4-2937 (office)	319-321-1180 (cell)	
Rams	5-7917 (office)	319-341-5826 (home)	319-321-6189 (cell)
Ernie Fuentes	3-4244 (office)	319-248-3538 (home)	319-594-4820 (cell)
Maintenance – building issues (i.e. water leaks – call staff first!)			5-5071
HPO – health safety issues (i.e. large chemical spills – call staff first!)			5-8501