NMR Lab Covid-19 Policies and Procedures
27 May 2020; Ken Knott and Dr. Narasimhamurthy Shanaiah; Virginia Tech

NMR Facility open to APPROVED CoS Research Groups ONLY

NMR Lab Changes – Staff & Lab

- Details of this plan may change over time, but the overall goal is always to maintain physical distancing for all NMR Staff and users.
- The NMR Lab will be staffed 9am to 5:30pm daily.
- NMR Staff could have a staggered schedule
  - Staff may initially work part-time from home and part-time on campus.
  - Ken (kknott@vt.edu; 1-0885)
  - Dr. Murthy (nmrns@vt.edu; 1-8256)
  - Email or phone staff for assistance. Do Not just drop into their offices.
  - Staff schedules are posted in 006HHS on all NMR Lab doors.
- The main door to 006HHS containing the A3, A4, A5, A6 and INOVA 400 will be kept open during business hours to allow touchless entry and exit.
- Expect a minimum of chairs in the Lab, no place to sit while you wait, and nothing extra to read.
- Expect no pens or pencils.
- Please email Ken Knott if there are any issues with instrumentation.

NMR Lab Changes – Students

- Students are expected to complete the VT EHS Covid-19 Training.
- Wear a facemask when in a room with others.
- Minimize conversation in the NMR Lab. Here’s why. Here’s a good article on the issues.
- Always maintain physical distancing. Try not to cross paths with anyone in a doorway.
  - No spectators. Come to the Lab alone.
  - Perform tutoring at the instrument from a distance.
- Special considerations for the FACES reservation instruments in 006HHS (magnets are well-separated, but 5 total magnets).
  - Do not come to the NMR Lab in 006HHS without a reservation
  - Please use your personal computer or phone to make reservation on the FACES system.
  - (http://faces.crc.uga.edu/) Group: VATECHNMR
  - Don’t use the offices of Ken, Geno or Murthy to go between 006HHS and 002HHS
- Robot instruments in HHS002 (MR400 and U4DD2) are no longer accessible via walkup.
  - Procedures detailed on the next page.
  - Access to the robot instrument room (002HHS) is prohibited.
- When crossing paths with someone in the room or hallway; to let a person pass, please step aside momentarily into the doorway area of a lab to maintain physical distancing.
- Fresh gloves in the lab are optional. Do NOT wear gloves from the lab in the NMR Facility.
- We strongly recommend that you wash your hands before and after entering the NMR Facility.
Automated System Protocols - MR400 and U4DD2

- To prevent the automated systems and 002HHS becoming a transmission vector due to the high volume of use and traffic, the automated systems will be operated on a Sample Dropoff system external to the facility. No entry will be allowed in 002HHS.
  - Drop-offs will be available 24 hours a day
  - Samples will be submitted multiple times by staff during working hours.
- Users are expected to fill out a shared Google Drive spreadsheet with details for each sample
  - The Sample column will indicate the tray location ID you will use. Use the first empty location in the spreadsheet. Do not skip locations.
  - There is a workbook page for submissions to the MR400 and to the U4DD2.
  - See the Example workbook page for how to properly fill out the spreadsheet.
  - Also listed are experiment names, and solvent list.
  - Please be careful and DO NOT delete anything! This is a shared spreadsheet.
  - Bring samples to the NMR lab quickly after filling out the submission form.
  - It is critical that NMR tubes are clearly labeled to match the sample name!
- Load samples in NMR tube racks outside of the NMR facility for the correct instrument.
  - Load samples into the location you filled out on the online submission spreadsheet.
- It is strongly preferred that each research group collect samples for delivery to the NMR facility by a single individual rather having each member drop off their samples.
  - Please limit sample deliveries to as few times as possible per day per research group.
- Staff will load samples as needed up to several times per day.
- Special situations such as urgent samples or reaction monitoring must be scheduled with NMR staff by email.
- NMR tubes will be returned to users by Group in labeled jars. Please take your groups tubes back with you when submitting samples.
- Clearly label your NMR tubes to reduce accidents or lost samples.

NMR Lab Changes – New Users

- New Users should email Ken Knott to schedule training and receive instructions.
- Training for New Users will involve several pre-recorded modules covering lab safety and protocols, instrument use, and Mnova data analysis.
- Each module will have a follow up quiz and Zoom evaluation by the NMR facility staff.
- You will be given a list of skills you should be able to perform on your own under the observation of an NMR Lab Staff member.

Sanitation Protocols

- Users are expected to place a new plastic film cover on the keyboard and mouse at each instrument. Remove the film after use.
- Hand sanitizer and disinfectant will be provided.
- We will spray the area around the keyboard and mouse several times per day.
- As mentioned, please wash your hands once you return to your own lab
- A typical workstation will be outfitted like this: