

**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](mailto:ken.knott@vt.edu) 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.ccrcc.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 than 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:

