



## Electronic Services Announcements

### For Emergency Repairs

Please *contact both* the preferred technician needed and the general Electronic Services email [scs-es@illinois.edu](mailto:scs-es@illinois.edu) so that all staff are directly notified of the urgent request.

### Repair Work Procedure

When submitting a work order for an item for repair, please wait to be contacted for a drop off location for your repair item. *DO NOT* leave repair items in the hallway outside of 76NL unless instructed to do so. This hallway must remain open and free of equipment.

### Rebuilt Pumps for Sale

We have several rebuilt 1400 Welch pumps that are available for purchase at the cost of the rebuild \$1120.28. Electronic Services will guarantee proper functionality for up to 6 months after purchase.

**Electronic Services**  
[scs-es@illinois.edu](mailto:scs-es@illinois.edu)

## Microanalysis Lab CHN Turnaround Time

Beth Eves is back and normal turn around times have resumed for CHN. Please continue to send your CHN capsule requests for air sensitives and notification of sample drop off to the Microanalysis general email account.

**Microanalysis Lab**  
[scs-microlab@illinois.edu](mailto:scs-microlab@illinois.edu)

## Cell Media Announces Changes During ESCO Renovation

The current dates for the energy conservation (ESCO) project renovation in Cell media are March 8-April 25th. During this renovation period, the items in room 490 RAL will have a new temporary location.

### ▼ Relocated to 406 RAL:

- Cryostorage tanks for cells etc.
- Storm Imager

### ▼ Relocated to 408 RAL:

- Custom media pickup refrigerator
- Media plates refrigerator

### No Biosafety Cabinets Access April 5-April 25th

Please arrange with other labs or with Chen Zhang ([czhang8@illinois.edu](mailto:czhang8@illinois.edu)) of the High Throughput Screening Facility for the use of her biosafety cabinet for cell work.

We thank you for your patience and understanding during this renovation work.

## New 600-MHz Spectrometer Available Spring 2021

The SCS NMR Lab is pleased to announce that a new 600-MHz Bruker NMR spectrometer located in A149 CLSL, will be available this semester. It will be fitted with a Prodigy CryoProbe, a unit with detection electronics chilled using liquid nitrogen. This hardware format offers enhanced sensitivity plus unique decoupling capabilities described on the web page.

<https://scs.illinois.edu/resources/cores-scs-service-facilities/nmr-lab/instrument-information/b600-bruker-neo-nmr>

The spectrometer will be opened to all registered and trained NMR users. NMR staff will be contacting each faculty group to get them trained on the new equipment. The B600 will offer the same automation as the current CB500. Currently, samples can only be submitted manually in a procedure similar to that now used on the Lab's Varian spectrometers. Users will be kept informed as more system features become available.

### Available probes:

- BBO Prodigy Probe a 5-mm broadband probe, operating at room temperature. This probe enables us to do heteronuclei (e.g.,  $^{13}\text{C}$ )- $^{19}\text{F}$  correlation-type experiments, but it does not allow  $^1\text{H}$ - $^{19}\text{F}$  correlation experiments.
- Standby, room temperature, broadband probe is otherwise available.

### General Capabilities:

Equipped with a Prodigy probe and, in the future, a SampleXpress autosampler. Sample loading, tuning, locking, shimming and data acquisition are all automated. Users select NMR experiments and parameters from menus.

### Unique Capabilities:

- About 2-3-fold higher sensitivity than a non-CryoProbe 600.
- $^{13}\text{C}$  acquisition with standard  $^1\text{H}$  decoupling.
- $^{13}\text{C}$  acquisition with  $^{19}\text{F}$  decoupling.
- $^{13}\text{C}$  acquisition with  $^2\text{H}$  decoupling.
- $^{13}\text{C}$  acquisition with simultaneous  $^1\text{H}$  and  $^2\text{H}$  decoupling