

What Every New NSRB Screener Should Know

1. SCREENING ROOM STAFF:

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The best way to contact the screening room staff for questions is via the email (iccb_screen@hms.harvard.edu). This will send your email to each staff member. You can also contact the staff by phone at 617-432-5815.

2. OTHER SCREENING GROUP STAFF:

Caroline Shamu	Director of ICCB-Longwood
Su Chiang	Assistant Director of Screening (su_chiang@hms.harvard.edu)
Nathan Moerke	Senior Assay Developer (nathanmoerke@gmail.com)
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David Wrobel	Data Analyst (david_wrobel@hms.harvard.edu)
Jennifer Nale	Data Curator (jennifer_nale@hms.harvard.edu)
Kyungae Lee	Medicinal Chemist (kyungae_lee@hms.harvard.edu)

3. GENERAL INFORMATION

Our Websites, <http://nsrb.med.harvard.edu/> and <http://iccb.med.harvard.edu/>, are very extensive and can probably answer many of your questions. Please refer to our Websites first for your queries. We are constantly updating our Websites, so please let us know if you have suggestions.

4. YOUR SCREEN IS YOUR RESPONSIBILITY

The screening room staff help to train new screeners in the use of screening instruments, and answer questions about the screening facility. They also perform all pin transfer steps and run the complex automation for screens as required. ALL other steps of a screen (including reagent preparation) are the responsibility of the researcher. If you will need additional assistance, please contact Su Chiang.

5. PRIOR TO YOUR INITIAL VISIT

You must contact the NSRB staff several weeks in advance of your first visit to submit a preliminary protocol and supply list, and to discuss your goals and logistics in detail. If you intend to use any equipment during your first visit, we will reserve time on the appropriate instruments to ensure that you have access when you arrive. You should contact Su Chiang at least 3 weeks before you arrive to discuss your assay protocol.

Although the NSRB provides certain consumables and reagents, the facility does not normally keep these supplies in stock. It is therefore vital that we know in advance what you will need so that it can be ordered in time. Please do not assume that any specific item will be available unless you have discussed the situation with the screening room personnel and allowed sufficient time for ordering. Please also bear in mind that the NSRB does not cover the costs of certain supplies and reagents, and that the supply list must be confirmed with us for each individual screen. You should contact Su Chiang at least 2 weeks before you arrive to confirm your supplies list.

You must complete all relevant biosafety training at your current institution before beginning work at the NSRB.

If you are not a Harvard affiliate, you must provide a signed laboratory training statement.

6. INITIAL VISIT

On your first visit, you will be introduced to the screening group for a general overview of the screening process. Afterwards, you may begin training on the equipment.

7. USE OF SIGN-UP SHEETS

Equipment sign-up sheets are available online (http://iccb.med.harvard.edu/screening/Instrument_signups.htm). Please sign up with your name and a contact phone number. You are allowed to sign up for equipment up to four hours a day (exceptions can be made with permission from screening room staff, if scheduling allows). If you are not based in the HMS area, please contact the screening room to schedule time on the equipment.

8. PIN TRANSFER SCHEDULING

Pin transfer requests can be made either in person or through the online pin transfer request form (http://iccb.med.harvard.edu/screening/application/pin_transfer_form.htm). Our time slots are generally 11:00, 1:00, and 3:00, but we can make other arrangements if necessary. Screeners are limited to two hours of transfer time per day (exceptions can be made with permission from screening room staff, if scheduling allows). Please do not send pin transfer requests to individual staff members.

9. PIN TRANSFER REQUESTS

Your library plate NUMBERS for pin transfer must be submitted 24 hours before you are scheduled for pin transfer. There are no exceptions.

If you have questions about selecting library plates to screen, please consult Caroline Shamu or Su Chiang. An up-to-date list of available libraries and our recommendations for prioritizing them in your screen is always available from screening facility staff.

10. ASSAY PLATES

Assay plates prepared for pin transfer should be labeled with the library plate number from which compound will be transferred, and the replicate should be specified. For easiest handling, it is preferable that the label is on the short side opposite the letters. All lids should be removed, and plates should be stacked in an order agreed upon with a staff member before pin transfer.

11. BE READY

Your plates must be ready for pin transfer by your appointment time. Your appointment indicates when pin transfer will start. Make sure all plate filling, etc. has been completed by that time. Please be punctual, as delays can affect all following pin transfer appointments.

12. RESPECT THE SCREENING ROOM

The screening room is shared by many people. Please clean up after yourself and leave the machines ready for the next person to use. There is not much room for storage; please take everything with you unless previous arrangements have been made.

13. EXPERIMENTAL PROTOCOLS

Written protocols are required for each screen. A preliminary protocol is essential to help the screening room assist you in planning your screen, and the established screening protocol is necessary to understand the context of submitted data. The protocol can be simple but should include specifics such as volumes added, which instruments were used for liquid handling, pin transfer and plate reading; and the composition of any reagents. Please also include a description of what is considered a positive in the assay. Preliminary protocols should be sent to Su Chiang, and established protocols should be returned with the primary screen report (see below).

14. PRIMARY SCREEN REPORT

This report serves as documentation for your deposited screening data, and both should be returned to David Wrobel within 1 month of completing your primary screen, or within 3 months of initiating your primary screen.

15. CHERRY PICK REQUESTS

Cherry pick requests must be sent to David Wrobel, in the correct format, after annotated data have been submitted. This request will be forwarded to the screening staff, who will create your cherry pick plate within two weeks of receiving your request. You are allowed to request up to 0.3% of the total number of compounds screened. One microliter of each compound requested will be provided. You will be notified by email when your plate is ready.

16. MEDICINAL CHEMISTRY

After your primary screening data are returned to the NSRB, the NSRB medicinal chemistry group will provide a preliminary analysis of your screening positives. You may consult the NSRB medicinal chemistry group for advice on a variety of topics, including cherry picks, compound reorders, and structure-activity relationship studies. Please contact Su Chiang to arrange for chemistry consultation.

17. PROGRESS REPORTS

The NSRB may request short progress reports (1-2 pages) approximately every 6 months.