

Welcome to the Small Molecule Screening Facility(SMSF)

If you have any questions regarding your screening application, the process of screening or screen follow up, please ask us! Following are the steps you will need to follow for doing an SMSF high throughput screen (HTS).

1. Fill out and return an Application for use of the Small Molecule Screening Facility and the Keck-UWCCC Screening Agreement. Please read “A Simple Statistical Parameter for Use in Evaluation and Validation of High Throughput Screening Assays” by Xhang, Chung and Oldenburg and “Nonleadlikeness and Leadlikeness in Biochemical Screening” by Rishton.
2. Schedule a meeting with us to work out how we can best serve your needs and discuss how your assay can be scaled up for HTS.
3. Obtain enough of your assay reagents to perform the HTS.
4. Run a preliminary assay to confirm your CVs in the HTS format. This will consist of 2-3 384 well plates or 4-8 96 well plates.
5. Once the conditions are worked out in a preliminary screen, we can then run a library screen in which we will run your assay with the complete library.
6. After your assay is run, you will receive your data for analysis. After you have started your data analysis make an appointment with the SMSF Staff to record how your data is analyzed and define your “Hits”.
7. We will give you a small sample of your hit compounds (10 uL of ~1mM) to perform some initial follow up assays.
8. When you want to re-order compounds we offer assistance in obtaining your compounds.

As a core facility, the SMSF is a resource for all labs on campus interested in HTS. We are gathering information about the compounds in our library to share with SMSF users. We are also interested in promoting collaborations between SMSF users in the interest of furthering all of our scientific goals. Toward this end we ask that as you retest compounds please report your data (e.g. cytotoxicity and activity) about specific compounds back to us so we can track information about the compounds in our database. Please notify the screening facility of any presentations or talks you will be giving so we can put it on our calendar for our staff and other users. Also, please notify us as you publish your findings.

We will maintain a calendar of events of interest to SMSF users and organize SMSF User group meetings at which you will have the opportunity to discuss HTS issues with other SMSF Users. After you complete your assay, you will be given access to the data pertaining to your hits that has been obtained by previous SMSF Users.

We look forward to facilitating your research.

The Staff of the Small Molecule Screening Facility,

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