

R. I. Consortium for Nanoscience and Nanotechnology
High – content screening system Opera Phenix usage policy

A. Hours of Operation

1. Monday to Friday from 9:00 am to 4:30 pm for supervised users. Independent users have extended hours but have to coordinate access through the Water for the World laboratory members. All appointments are listed on our [reservation calendar](#).

B. Specimen Preparation

1. The HCS is suitable to analyze samples in 12, 96, 384 and 1024 well plates of high optical quality, and glass slides. Please contact one of the instrument managers for questions about suitable plates.
2. The stains and type of analysis to be performed depend on the goal of your experiment. It is the user responsibility to design the experiment that best suits the goals, and optimize the staining and fixation protocol for optimal results.
3. The Opera Phenix room is Biosafety Level 1. Cells must be fixed by the time you bring them to the facility. Please observe all biosafety protocols when handling your samples.

C. Training

1. New users must contact the instrument managers with a brief description of the type of work to be performed and approximate time frame.
2. New users will be asked to complete and submit a “User Registration Form”.
3. Users must contact the manager to schedule training prior to analyzing their specimens.
4. All practical training sessions are one-on-one. Training will be ongoing and will be provided during scheduled time. **Users cannot use new modes of operation for which they have not been trained.**
5. Instrument manager will train in all steps from sample preparation to data analysis. **Data interpretation is specimen-dependent and the responsibility will be on the user.** The manager will be available to assist.
6. Beginner users will become advanced users after the manager has deemed that users are sufficiently trained to work independently. Advanced users will prepare samples, operate the instrument and process and interpret data. The manager will be available to assist.

D. Instrument Usage

1. The instrument must be reserved by emailing engimg@etal.uri.edu **after consulting availability** on the [reservation calendar](#).
2. It is recommended that users schedule at least 2.0 hrs.
3. The HCS and HCS analysis computer are free of charge until further notice.
4. Users must provide their specimens, prepared under the instruction of one of the instrument managers, for their session.
5. The user will respect the instruction on the corresponding standard operating protocol, available as a hard copy in the facility, and the directions given to them by the instrument manager during training and subsequent usage.
6. The instrument manager will revoke user rights in case of instrument misuse.
7. The **hours must be logged in** using the web form 24 h after instrument use, at the latest.
8. The **use of the facility must be acknowledged** in any publications by including the following text in the Acknowledgements section: “*The Opera Phenix high-content*

screening system was purchased through a National Science Foundation Major Research Instrumentation, #1828057"

E. Data Management and Processing

1. All results are stored in local hard drive. Due to the native format of the data obtained, the data processing has to be done on the HCS workstation with Harmony software.
2. Selected images for publication can be exported manually, but all the images cannot be exported easily.
3. Once the data is processed through Harmony, result tables with the metrics of the images can be exported in .csv format for further processing by the user. This data must be copied with a **USB storage drive provided by the user.**