

## **BioImmunoCore Facility**

*BioImmunoCore (BIC) Facility at OE Building of Florida International University.*

**Location**     *OE 258/260*

**Hours of Operation**     *9:00 AM to 5:00 PM, Monday through Friday.*

**Reservations**     *An online system for scheduling equipment usage is currently being designed. Until that system is in place, please make arrangements through Alejandro Barbieri via [barbieri@fiu.edu](mailto:barbieri@fiu.edu)*

### **Mission Statement.**

*The business plan is to turn the BIC Facility into a charge facility that can cover at least 25% its running cost. The BIC facility will become a core facility serving researchers in our research community. The ultimate goal is to turn the BIC facility into a first class research support facility that is known for both its service and cutting edge technologies. In addition, the BIC facility will serve as a seed environment for developing new ideas, matching collaborators and facilitating communication among its users.*

*The BIC facility will provide investigators with*

- (1) Basic training Flow Cytometry,*
- (2) Special training in Graphic and Data Analysis for Flow Cytometry,*
- (3) Basic training in Protein and small compound Purification (FPLC and HPLC),*
- (4) Training and services in special techniques such as monoclonal antibody expression and purification,*
- (5) Basic and Specific training for Enzyme-Linked Immunosorbent Assay (Elisa),*
- (6) Phage antibody production expression and purification*
- (7) Direction to appropriate local experts for specialized consultations.*

### ***The development of the BIC facility will be divided into three phases***

***Phase I*** is the preparation and implementation phase. During this phase, the BIC facility will prepare for its official opening by organizing all necessary supplies, obtaining service contracts for the equipments and marketing its presence among potential users by various means (**Spring 2011**).

***Phase II*** is the operational phase. During this phase, the BIC facility will try to attract and maintain a stable user group by offering services on discount pricing and in collaborative manners. The BIC facility will work with the investigators so that the cost of the facility usage will be included in their grant proposals. In addition, this period of time will allow the core facility to fine tuning its management system (**Summer A 2011**).

***Phase III*** will be the official operation phase. During this phase, the BIC facility should already establish certain user groups and the business should be growing steadily toward its financial goal. The BIC facility will work on introduce new techniques into the facility through collaboration and development from the facility itself (**Summer B and fall 2011**).

### ***Equipment***

The BIC facility is now equipped with all necessary equipment to carry out basic and special services, including Accuri C6/Guava Flow Cytometry, HPLC, FPLC, Phastsystem, PCR machine, Freeze-drying machine, Freezer -80°C, Water purification system. Millipore, Shaker, Protein concentration equipment, Electrophoresis and Electro-elution equipments, Sonicator, Low and High speed Centrifuge, Elisa plate reader and shaker, CO<sub>2</sub> Incubator and EDA camera with Kodak analysis software for protein a DNA analysis. The BIC facility is only running as an extended laboratory space for the users at the moment. The equipments are generally in good shape with some maintenance work due, however there is no service contract for any equipment. There is currently no charge posted on any usage of the equipment.

### ***Product/Service Description***

The price of the services are calculated by several factors, including maintenance fee of the equipments, consumed supplies provided by BIC,

*labor fees for technical services provided, and indirect costs such as autoclave use, waste disposal, decontamination reagent cost, equipment depreciation and management cost. Fees are also calculated in reference to other similar facilities' charges on the similar services. For users within our department who use only the equipments regularly (no supplies from BIC provided), a simple monthly fee can be charged, which can be negotiated between the user and the department. The potential users of the BIC facility consist of three major groups: users from biological science department, users from other departments of FIU, investigators from other institutes. The users from biological science department will probably use the core facility as an extended laboratory only, meaning they will be more interested in using the equipment only.*

*The users from other departments probably require more technical support. Some research groups may explore opportunities in biomedical area outside their regular research activities, the tissue culture core can provide these groups such an opportunity at low cost. New faculty members of FIU may also use the core facility while their own laboratories are setting up. The core facility may charge a rental fee for the equipments and laboratory space used.*

*Investigators from other institute may take advantage of the BIC services by submitting their samples to the facility. The facility can process the sample and prepare the slides for them in a certain time frame.*

*New users are encouraged to contact the facility for any questions regarding sample preparation or the use of the Flow Cytometry in their research. New users will not be charged for initial observations (up to 1 hr) to determine if the Flow Cytometry can assist them in their research project.*

### **Training**

*Only staff will train and certify users in the operation of the instrument. It will be a \$100 fee per individual training.*

*The **BIC Facility** will offer a monthly training for researchers. In addition, the **BIC Facility** will offer a hand-on workshop for both undergraduate and graduate students, which will include, phage antibody production, FPLC and Flow cytometry.*

**Free structure**

<i>--Accuri C6</i>	<i>\$60/hr with support add \$40/hr</i>
<i>--Accuri C6 Graphics and Data analysis</i>	<i>\$100/hr by appointment only</i>
<i>--HPLC/FPLC</i>	<i>\$60/hr with support add \$30/hr</i>
<i>--Monocolonal antibody expression and purification</i>	<i>\$300 per liter</i>
<i>with support and material add</i>	<i>\$500 per liter</i>
<i>--Phage antibody production expression and purification</i>	<i>\$800 per sample</i>
<i>--Elisa set up and data analysis</i>	<i>\$100 per sample</i>