

Appendix A: Example of a Service Center Proposal

Proposal for the Establishment of ABC Testing Service Center

Description of Services to Be Provided

This service center will perform ABC tests on samples. As ABC tests are fairly standard across sample types, this service will be billed out per ABC test. Programmatically, this service center will be managed by the Service Center Director, Dr. Smith. There will also be oversight from the Department Chair, Dr. Jones.

Market Analysis

This service is currently available locally from two outside labs. Currently, their rates for this service are as follows:

Quality Testing Services	\$360 per test
Superior Testing Services	\$340 per test

We believe that our current project price of \$350 per test is comparable with these external vendors and believe having these testing services available on campus will be of great benefit to the researchers on campus. Also, if volumes increase as projected our prices will be less than what is available externally.

5-Year Service Volume Projections

We estimate that we will perform tests on 700 samples in the first year of operation. We expect, based on the growth in this type of research that the demand for ABC tests will grow at a rate of 10% per year. A listing of some of our significant potential customers are as follows:

Principal Investigator	Award	Awarded/Pending	Est. # of Tests
Dr. Barry	NIH Program Project	Awarded	200
Dr. Colin	NHLBI R01	Pending	50
Dr. Johnson	Various Clinical Trials	Awarded and Pending	75
Dr. Smith	Various R01s	Pending	100
Dr. Miller	Intramural Award	Awarded	15

5-Year Cost Projections

Salaries and Benefits

To run 700+ ABC tests a year, we will need 1.5 FTEs of technicians. These technicians will run all 700+ tests as well as perform basic maintenance and quality control on the testing equipment. They will also maintain the activity logs for the service center.

Total annual hours (52 weeks X 40 hours)	2,080
Less: Vacation, Sick, Holidays, personal days (54 days X 8 hours)	(432)
Total Working Hours	1,648
X 1.5 FTEs	<u>X 2</u>
Total Working Hours	3,296
Less: Maintenance hours (8 hours per week)	(416)
Total billable hours	2,880

Since each test takes between 3-4 hours, it is estimated that 1.5 technicians could run 720-960 tests per year. These technicians earn approximately \$50,000 per year.

These technicians will be supervised by Dr. Smith. Dr. Smith will spend approximately 10% of her UMB effort supervising the ABC test lab. Dr. Smith earns \$150,000 per year.

Mr. Brown will perform all of the purchasing, billing and other administrative tasks related to this service center. It is estimated that he will spend 25% of his time performing these functions for the service center. Mr. Brown earns \$75,000 per year

All fringes are estimated at 26% per year. All salaries and fringes are projected to grow at 3% per year.

Supplies

Each test requires approximately \$20 of reagents. There are also other supplies (cleaning supplies, test tubes, swabs, etc.) that cannot be attributed directly to each test. These are estimated at \$500 a month.

Telephone and Postage

Telephone and postage is estimated at \$100 a month.

Travel

In order to keep up with the latest technologies and techniques, the technicians will be sent to training each year.

Depreciation

The ABC test is run using an XYZ meter. An XYZ meter costs approximately \$250,000 and has an estimated useful life of 8 years. Therefore, annual depreciation expense will be \$31,250.

Samples are prepared using an LMN prepping machine. It is estimated that this machine will cost \$50,000 and have an estimated useful life of 5 years. Therefore, annual depreciation expense will be \$10,000.

The ABC lab will require a freezer for the storage of samples. The department has agreed to let us use a surplus freezer. However, it is expected that this freezer will need to be replaced after a few years. This new freezer will cost \$5,000 and will have a useful life of 10 years.

Maintenance contracts

The annual maintenance contract on the XYZ meter is \$25,000 per year. This will cover any repairs as well as an annual maintenance service.

Other Initial Start-Up Costs

To initially set-up the ABC test lab, we will need to purchase several pieces of non-capitalizable equipment. This is detailed as follows:

Lab equipment (various pieces)	\$15,000
Computers (2)	4,000
Printers (2)	1,000
Telephone	<u>200</u>
	\$20,200

Also, it will take approximately 2 months to set-up the lab (install and calibrate equipment, for example). During this time no tests will be able to be performed.

Space Needs

This service center will exist in two labs in the Broadway Research Building that are currently assigned to our department, rooms 253 and 254.

Description of Billing Procedures

All potential customers will complete an order form describing the parameters of the tests than need to be performed and number of samples to be tested. This form will also indicate the chartstring that will pay for the test. See attached order form. Dr. Smith will review all orders for completeness and schedule the tests to be performed. The technicians will keep detailed logs as to the samples they worked on and the order to which the samples belonged. On a monthly basis, Mr. Brown will reconcile the order forms completed with the activity log and bill the chartstring provided on the order form using an on-line journal voucher.

Equipment Listing

Equipment Purchases:

Item	FY of Purchase	Estimated Cost
XYZ meter	2011	2,500,000
LMN Machine	2011	500,000
New Freezer	2013	5,000

Existing Equipment:

Description	Tag Number	Original Funding Source
Old Freezer	00009586	Departmental Funds

ABC Testing Service Center
5-Year Projections of Volumes and Costs with Rate Calculation

	2011	2012	2013	2014	2015	Total
ABC Test Volume	583	770	847	932	1,025	4,157
Salaries						-
1.5 Technicians	100,000	103,000	106,090	109,273	112,551	530,914
Dr. Smith	15,000	15,450	15,914	16,391	16,883	79,637
Mr. Brown	18,750	19,313	19,892	20,489	21,103	99,546
Total	133,750	137,763	141,895	146,152	150,537	710,097
Fringes	34,775	35,818	36,893	38,000	39,140	184,625
Supplies						
Reagents	11,667	15,400	16,940	18,634	20,497	83,138
Other Supplies	6,000	6,000	6,000	6,000	6,000	30,000
Telephone and Postage	1,200	1,200	1,200	1,200	1,200	6,000
Travel	3,000	3,000	3,000	3,000	3,000	15,000
Depreciation						
XYZ Meter	31,250	31,250	31,250	31,250	31,250	156,250
LMN Machine	10,000	10,000	10,000	10,000	10,000	50,000
Freezer			500	500	500	1,500
Maintenance Contract	25,000	25,000	25,000	25,000	25,000	125,000
Other Initial Start-up Costs	20,200					20,200
Total Operating Costs	276,842	265,431	272,678	279,736	287,124	1,381,810
Calculated Cost per test	475	345	322	300	280	
Charging Rates	350	350	350	350	325	
Projected Revenues	204,167	269,500	296,450	326,095	333,083	1,429,294
Surplus/(Deficit)	(72,675)	4,069	23,772	46,359	45,959	47,484
Cumulative Surplus/(Deficit)	(72,675)	(68,606)	(44,834)	1,525	47,484	

**ABC Testing Service Center
Summary of Start-up Costs and Funding Needs**

	2011	2012	2013	2014	2015	Total
Operating Activity:						
Annual Operating Surplus/(Deficit)	(72,675)	4,069	23,772	46,359	45,959	47,484 *
Cumulative Surplus/(Deficit)	(72,675)	(68,606)	(44,834)	1,525	47,484	
Equipment Reserve Chartstring Activity:						
Equipment Purchases						
XYZ meter	(250,000)					(250,000)
LMN machine	(50,000)					(50,000)
Freezer			(5,000)			(5,000)
Depreciation Recoveries						
XYZ meter	31,250	31,250	31,250	31,250	31,250	156,250
LMN machine	10,000	10,000	10,000	10,000	10,000	50,000
Freezer			500	500	500	1,500
Funding Inflows/(Outflows)	331,425	(45,319)	(27,356)			
Annual Reserve Surplus/(Deficit)	72,675	(4,069)	14,394	41,750	41,750	207,750
Cumulative Surplus/(Deficit)	72,675	68,606	83,000	124,750	166,500	
Combined Cumulative Surplus/(Deficit)	-	-	38,166	126,275	213,984	-

* Projected operating surplus balance is less than 90 days worth of projected expenses