

Program Review

**Bachelor of Science in Cytotechnology**

**College of Health Professions**

**November 2008**



**MARSHALL UNIVERSITY**

Program Review  
Marshall University

Date: November 2008

Program: Bachelor of Science in Cytotechnology  
Degree and Title

Date of Last Review: 2003

### Recommendation

Marshall University is obligated to recommend continuance or discontinuance of a program and to provide a brief rationale for the recommendation.

Recommendation

Code (#):

- 1. Continuation of the program at the current level of activity; or
- 2. Continuation of the program with **corrective action**: Corrective action will apply to programs that have deficiencies that the program itself can address and correct. **Progress report due by November 1 next academic year**; or
- 3. Identification of the program for **resource development**: Resource development will apply to already viable programs that require additional resources from the Administration to help achieve their full potential. This designation is considered an investment in a viable program as opposed to addressing issues of a weak program. **Progress report due by November 1 next academic year**; or
- 4. Continuation of the program at the current level of activity, with the designation as a program of excellence (See Series 11 Statement from the Policy Commission); or
- 5. Discontinuance of the program (Procedures outlined in HEPC Administrative Bulletin 23).

**Rationale for Recommendation:** (Deans, please submit the rationale as a separate document. Beyond the College level, any office that disagrees with the previous recommendation must submit a separate rationale and append it to this document with appropriate signature.)

Recommendation: \_\_\_\_\_ Signature of person preparing the report: \_\_\_\_\_ Date: \_\_\_\_\_

Recommendation: \_\_\_\_\_ Signature of Program Chair: \_\_\_\_\_ Date: \_\_\_\_\_

Recommendation: \_\_\_\_\_ Signature of Academic Dean: \_\_\_\_\_ Date: \_\_\_\_\_

Recommendation: \_\_\_\_\_ Signature of Chair, Academic Planning Committee: (Baccalaureate pgms only) \_\_\_\_\_ Date: \_\_\_\_\_

Recommendation: \_\_\_\_\_ Signature of President, Faculty Senate/ Chair, Graduate Council: \_\_\_\_\_ Date: \_\_\_\_\_

Recommendation: \_\_\_\_\_ Signature of the Provost and Senior Vice President for Academic Affairs: \_\_\_\_\_ Date: \_\_\_\_\_

Recommendation: \_\_\_\_\_ Signature of the President: \_\_\_\_\_ Date: \_\_\_\_\_

Recommendation: \_\_\_\_\_ Signature of Chair, Board of Governors: \_\_\_\_\_ Date: \_\_\_\_\_

# College/School Dean's Recommendation

Deans, please indicate your recommendation and submit the rationale.

## Recommendation:

Continuation of the Program at the current level of activity.

## Rationale:

The Department of Clinical Lab Sciences (CLS) provides a vitally important service to the regional healthcare system. The graduates of the program are highly skilled and are a vital resource in supporting diagnostic procedures critical to accurate interpretation of medical symptoms. One unique contribution is the BS in Cytotechnology.

Cytotechnologists are the experts who evaluate and characterize cells as normal or abnormal. Anytime a laboratory assessment is done on tissues to support a diagnosis, particularly related to cancer or other cell diseases, a cytotechnologist has reviewed the cells and at least one double check verification has been done. Cytotechnologist are probably the most highly regulated allied health profession and their diagnostic skills are essential to the health care system.

Cytotechnologists are trained in a closely supervised hospital-based program. Marshall is fortunate to partner with Cabell Huntington Hospital (CHH) in providing the BS in Cytotechnology. CHH provides the accredited Cytotechnology training component and Marshall provides the academic coursework needed for the BS degree. Due to clinical training limitations, this program is quite small; the one-on-one nature of the clinical training is critical to the level of accuracy required for cytotechnologists.

The Cytotechnology degree provides the foundation in scientific principals and diagnostic procedures in the classroom and teaching lab as well as clinical experience. Cytotechnology is a very small program with no more than 4 students graduating in any year. The accreditation for the Cytotechnology program resides with the clinical facility, which in Marshall's case is CHH. Students complete three years at Marshall and take their Cytotechnology courses and laboratory training at CHH. Without the accredited Cytotechnology program at CHH, this degree would not be available at Marshall. Continuance of this partnership is essential to providing qualified cytotechnologists to the region.

Similar to the MLT and MT degrees, clinical experiences at a qualified accredited facility is essential to maintain this program and to keep enrollment at a viable level. If CHH were to close the Cytotechnology training program, Marshall would have limited options and the program would not be able to admit students. The Program Director has been successful in working with CHH to maintain our partnership to allow sufficient placements for Cytotechnology students, and we will continue to work to maintain this vital relationship.

CLS is in the third year searching for a qualified faculty member. This field has a 20% shortage of faculty nationwide, particularly faculty with doctoral degrees. The department has one senior full professor, one 4<sup>th</sup> year assistant professor and one temporary faculty member. Success in hiring additional permanent faculty will be an important factor for the department.

The Cytotechnology program is a vitally important resource for the region and the faculty are successful in graduating qualified practitioners in partnership with CHH. I recommend the program for continuation at the current level.

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Signature of the Dean

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Date

## Marshall University Program Review

Program: Bachelor of Science in Cytotechnology

College: College of Health Professions

Date of Last Review: 2003

### I PROGRAM DESCRIPTION

Cytotechnology is the third program offered by the Clinical Laboratory Sciences (CLS) Department. This program is significantly different from the other two programs offered. The first difference is that the Bachelor Degree in Cytotechnology is a “3+1” model program. A student completes 3 years of prerequisite courses and then completes a 12 month clinical component in a hospital-based School of Cytotechnology. During the past five years, students could have obtained the final practicum year at either Cabell Huntington Hospital (CHH) or Charleston Area Medical Center (CAMC). The program at CAMC has been inactive since spring 2004; therefore, currently students attend their final year at Cabell Huntington Hospital.

During the first three years of the curriculum, the pre-cytotechnology student takes the prerequisite courses required for entrance into the fourth year clinical component. These courses include basic chemistry, organic chemistry, introductory biology, anatomy, physiology, cell biology, histology, genetics and microbiology as well as other non-science courses required to graduate with a bachelor’s degree. These science courses are necessary for understanding the cytotechnology courses taken during the senior clinical year. These courses provide the background necessary for the students to develop the complete independent judgment required for the profession.

The second difference is that in cytotechnology, the area of study is the anatomical pathology sections of the medical laboratory; The MLT and MT programs are both in the clinical sections of the medical laboratory. Cytotechnologists work closely with pathologists, and work mostly in hospitals or commercial laboratories. The anatomical pathology sections, and in particular, cytotechnology examine cells for changes that may indicate disease processes, including tumor cells or certain microbiological agents. The specimens that are first screened by a cytotechnologist may be pap smears, abnormal fluids producing infection or cancer, or fine needle aspirations. Fine needle biopsies may be obtained from any organ or tissue in the body.

The cytotechnologist appropriately stains specimens for examination, and looks for abnormal changes that may be present using independent critical thinking skills that have been obtained during the first three years at Marshall University and the fourth year practicum. Cytotechnologists also determine if any appropriate sample has been obtained by examining the other tissue cells that may be present. It is important that the specimen be appropriate to ensure accurate examination of cells.

Some Pap smear specimens are being examined using new instrument technology capable of determining changes in the cells in each specimen. However, if abnormal changes are detected by the instrumentation, it is the responsibility of the Cytotechnologist to make critical decisions to confirm the abnormal findings.

Genetic molecular techniques are also being used in the Cytotechnology laboratory since many viruses cause cellular changes that can be identified using these techniques. Another use for molecular diagnostics is that amounts of DNA in cells can be determined. The cytotechnologist can quantitate the amount of DNA present in the average cell, and using molecular techniques determine abnormalities that aid in initiating earlier treatment for many cancers.

## II ACCREDITATION INFORMATION

- A** The Cytotechnology (CT) program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in conjunction with the Cytotechnology Program Review Committee (CPRC). The accreditation procedures are fully prepared and all necessary fees paid by the School of Cytotechnology at Cabell Huntington Hospital.

Address: 35 East Wacker Drive Suite 1970  
Chicago, IL 60601

- B** Accreditation conferred on April 18, 2006 through 2012. See attached copy of letter conferring accreditation (**Scanned Documents**).
- C** Accreditation status: Regular
- D** See attached scanned copy of the Accreditation Report.
- E** In April 2006, the CT program at Marshall University was granted regular accreditation through 2012. There were no deficiencies noted during the site visit.
- F** The most recent Self Study report is available upon request.

### III PROGRAM STATEMENT on Adequacy, Viability, Necessity and Consistency with University/College Mission

#### A. ADEQUACY

##### 1. Curriculum:

The Cytotechnology curriculum is a 3+1 model, where in the first three years cytotechnology students take courses that are required to enter the practicum year, as well as all of the Marshall Plan and College of Health Professions courses. The minimum requirements include 20 credit hours of biological science, 8 credit hours of chemistry and 3 credit hours of mathematics. The American Society for Clinical Pathology (ASCP) requires graduates of an accredited School of Cytotechnology to have a bachelor's degree to be eligible to take the certification examination. The complete listing of the specific courses is included as well as a schedule of when the courses should be taken. These prerequisite courses provide the students with the necessary information required to integrate the material that was learned at Marshall University with the specific material required for the field of Cytotechnology (**See Appendix I**).

##### 2. Faculty:

Currently, there are three full time faculty members in the Clinical Laboratory Sciences Department. None of the faculty members are certified Cytotechnologists. The only courses taught in the CLS department that the Cytotechnology students take are CLS 100: Introduction to Health Professions, and CLS 460: Laboratory Management and Supervision. In CLS 100, the Education Coordinator/Cytotechnology Section Supervisor at Cabell Huntington Hospital gives a lecture on the field of Cytotechnology. One of the CLS faculty members is responsible for coordinating the course and all three faculty members have been course coordinators in the past. The CLS 460 course is taught by CLS faculty members who have had experience in the clinical laboratory in management and supervision.

The Marshall University CLS faculty advise the pre-cytotechnology students during the first three years of the curriculum and aid in the student application process into the fourth year clinical practicum.

The Education Coordinator of Cabell Huntington Hospital School of Cytotechnology is an employee of the hospital. The Education Coordinator is a certified Cytotechnologist and maintains the

appropriate continuing education and screening qualifications to hold the position of education coordinator by the accrediting body. **(See Appendix II for Detailed Faculty Data Sheets).**

### 3. Students:

#### a. Entrance Standards:

Entry into the Cytotechnology program requires formal application by the student and competitive selection by an admissions committee. This admission committee is comprised of the Chair of the Marshall University CLS Department and the Education Coordinator for the School of Cytotechnology.

Successful completion of the pre-clinical academic program does not automatically assure admission to the Cytotechnology program. The enrollment at the hospital-based program is limited and independent of Marshall University. Cabell Huntington Hospital is approved for 4 students per year, and priority admission is given to Marshall University students.

An applicant for the Cytotechnology program must have an overall 2.5 GPA. Applicants for the final year of Cytotechnology training provide a letter of application, a completed transcript review form and two letters of reference to the CLS department between January 1 and February 15 of the year they seek admission. Late applications are accepted on a space available basis. Copies of applications and transcript review applications are available in the CLS department and on the CLS department website. The admissions committee selects qualified applicants to fill available student positions on the basis of grade point average, letters of reference and personal interviews conducted at the hospital facility.

#### b. Entrance Abilities:

There is not a clear relationship between a student ACT score, SAT score, or GPA and the success rate in the Cytotechnology program. Some students with lower GPAs may do well if they are highly motivated to succeed in the program. It is important that students meet prerequisite course guidelines for admission into the program as this is the best predictor of academic success. The course work is

very demanding and heavy in upper level science courses. **Table 1** outlines data available for average ACT and SAT scores of new freshmen pre-cytotechnology students.

\*Denotes number of students for which data is available

\*\*In Fall 2005 there were no students admitted to the School of Cytotechnology at Cabell Huntington Hospital due to School restructuring activities.

**Table 1: New Freshmen**

Year	ACT Composite	SAT Verbal	SAT Math
Fall 2003	23.6 *(3)	620.0 *(1)	500.0 *(1)
Fall 2004	18.5 *(2)	No data available	No data available
Fall 2005**	NA	NA	NA
Fall 2006	20.0 *(2)	510.0 *(1)	460.0*(1)
Fall 2007 (one transfer student admitted)	No data available	No data available	No data available

c. Exit Abilities:

Once a CT student has entered the fourth year of the Cytotechnology program, the success rate is very high. Students can take the national certification examination through the American Society for Clinical Pathology (ASCP) and pass rates are above national averages.

**Table 2** displays students average GPA for the five year period graduating with a Bachelor of Science in Cytotechnology. The overall five year average was 3.14, which is slightly above the five year College of Health Professions average GPA of 3.13.

**Table 2: Average GPA**

	2003-4	2004-5	2005-6	2006-7	2007-8
Average GPA	2.75	3.29	2.85	3.18	3.61
# Graduates	3	3	4	3	2

There is a 100% job placement rate for all CT graduates seeking employment in the clinical laboratory, and most find jobs in the tri-state area. In addition to hospital laboratories,

some graduates of the program are employed by Labcorp, which is a commercial laboratory that has an office in South Charleston, WV. According to the U.S. Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook for 2008-2009, CT jobs are projected to have a higher than average employment growth and excellent job opportunities.

**4. Resources:**

**a. Financial:**

The CLS department budget is supported entirely through university allocations and student fees. Marshall University CLS department does not financially support the Cytotechnology program; the School of Cytotechnology at Cabell Huntington Hospital is responsible for funding the clinical curriculum of the program. The department budget is approximately \$13,000 and the CLS department does not have a secretary, but does get administrative support from an administrative assistant in the Dean's office who is shared with two other College of Health Professions Departments.

The School of Cytotechnology at Cabell Huntington Hospital charges tuition of \$5000.00 for the fourth year curriculum. Students who have completed at least 24 credit hours at Marshall University may apply for a tuition waiver for the clinical year. Cytotechnology students pay the health professions fees, program specific fees, and CLS department fees for CLS courses to Marshall University.

If the CT program were eliminated, there would be no cost savings to the CLS department. The faculty members would still provide the CLS courses offered to CT students to both MLT and MT students. The School of Cytotechnology admits Marshall University students as their top priority, and would suffer a great loss if Marshall eliminated this program.

**b. Facilities:**

Since the pre-cytotechnology students primarily take general university courses, the facilities of the University are adequate. The hospital-based program is required to comply with the facility requirements of the accrediting body.

## 5. **Assessment Information:**

- a. The School of Cytotechnology at Cabell Huntington Hospital is affiliated with the Department of Clinical Laboratory Sciences at Marshall University as the degree granting institution. All instruction and assessment activities for Cytotechnology students are performed at the hospital site. The primary goals for the BS in Cytotechnology are: 1) Select quality applicants from Marshall University for internships at the Cabell Huntington Hospital School of Cytotechnology, 2) Provide undergraduates with access to internships that prepare them with knowledge and experiences necessary for national certification as cytotechnologists, and 3) Prepare graduates to meet proficiency requirements for general science, computer literacy, intensive writing, capstone experiences, international, multicultural, and other requirements established at Marshall University. See the attached **Chart I Assessment Summary**.
  
- b. **Improvements in Program Quality:** (Cytotechnology Self Study Report): The ASC listserv is an excellent source of timely information for the evaluation of course content of the program and how it is or is not meeting the needs of our students and their employers. Oral and written comments from students led to a change in our 3-month evaluation forms. The publication of the latest Bethesda terminology led to a revision of our daily screening forms. The following changes were instituted as result of the evaluation process: 1) The addition of lectures on Immunostaining, HPV DNA typing, and flow cytometry, 2) new employer faculty evaluation forms were instituted, 3) three month student evaluation forms were revised to better reflect the feedback needed for students to progress, 3) new daily screening forms to reflect the new Bethesda system terminology, 4) the completion of a capstone experience was added to every degree requirement, 5) the addition of a course in laboratory management at the university level.
  
- c. **Graduate and Employer Satisfaction:** All students who apply for graduation for the Bachelor in Cytotechnology are given a graduate survey; however, the response rate has not been high. From the very few respondents, they were all very satisfied with the instruction and support that they received while in the CT program. Since our program is small, many of the students keep in touch with the

department and are mainly employed at local hospitals after graduation. During clinical site visits at these hospitals, all employers are generally satisfied with the graduates of the Marshall University CT program, and often contact the department to inquire about the number of anticipated graduates each year. There is a 100% job placement rate for all CTs seeking employment in the field, and most are employed in the Tri-State region.

- d. **Office of Assessment Summary Reports:** Previous summary reports from the past five years are attached (**See Scanned Documents**).

**6. Previous Reviews:**

The previous program review recommended that the Bachelor of Science in Cytotechnology program be continued at the current level of activity. There were no deficiencies or further recommendations from the committee.

**7. Strengths/Weaknesses:**

Strengths:

- **Atmosphere Conducive to Learning:** Cabell Huntington Hospital School of Cytology has been operating for 35 years. The staff of Cytologists has many years of experience in screening and in working with students. They each have a genuine desire to see students excel while enjoying their learning experience. The students and staff have a relationship in which students feel comfortable asking questions and giving feedback. There is a one to one student-instructor ratio facilitating this process.
- **Employment is available locally for graduates:** most of the graduates of this school are local students and have strong ties to the area. Cytotechnology is one of the few employment opportunities for students to remain in West Virginia. Laboratory Corporation of America has transferred much of their northeastern cytology work to West Virginia because of the availability of technologists. An additional bonus for the students is that Pathologists they trained under also give the final validation to abnormal slides reviewed by the lab, which provides

students with the additional knowledge of this important process.

- Pathologists who genuinely care about students personally and have a desire to see that students learn.
- The addition of the Joan C. Edwards Comprehensive Cancer Center will add a larger variety of specimens and offer students an opportunity to experience more of the clinical aspect of cancer diagnosis.
- Good tissue correlation with Cytology specimens: the majority of abnormal cytology diagnoses have biopsies and surgeries performed at Cabell Huntington Hospital.
- The addition of three interventional radiologists who have added to the variety of fine needle aspiration specimens.
- After several years and the failure of three previous renovation attempts to materialize, remodeling of the Cytology department has begun. When finished, students will have their own room, with ergonomic cubicles, in close proximity to the screening room for techs. All specimen processing will be centralized in one room. Currently, specimen processing is separated from staining and cover slipping.

#### Weaknesses:

- An undercurrent of uncertainty as to the continued financial support of the hospital for this program: in 2001, the program was targeted by Ernst and Young to be eliminated. It was only through the efforts of the Medical Director of the laboratory that it was spared. At that time, tuition was raised to \$5000.00 and the stipulation that the program must have 4 students was added. When one student withdrew from the program during the first week, there was uncertainty as to whether the program would continue. Because a class had been accepted and had already started, approval was given to continue. Although no indication has been given that funds will not be forthcoming in future years, neither has assurance been received that they will. The director of the Cytotechnology program at Cabell feels that as long as the hospital is doing well financially then the Cytotechnology program will continue.

- The need for a new multi-head microscope: although adequate for now, the resolution of the system is declining. A new system was denied on the last hospital budget.
- The inclusion of students within the same room as techs: while this is advantageous in some ways, the noise factor does not always facilitate learning; renovations will aid in removing this weakness.

## **B. VIABILITY**

### **1. Articulation Agreements:**

Currently there are no articulation agreements for the CT program.

### **2. Off-Campus/Distance Delivery Classes:**

Not Applicable

### **3. Service Courses:**

Not Applicable

### **4. Program Course Enrollment:**

**Appendix V** provides a summary of all courses taken in the CT program over the past five years.

### **5. Program Enrollment:**

A summary of program enrollment is provided in **Appendix VI**.

### **6. Enrollment Projections:**

According to the U.S. Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook for 2008-2009, CT jobs are projected to have a higher than average employment growth and excellent job opportunities. The Cytotechnology program has a capacity for only four students under the present circumstances, however, due to the projected availability of jobs, it is predicted that more students from Marshall University will apply for entry into the program.

### C. NECESSITY:

1. **Advisory Committee:** The advisory committee for the CT program is composed of Linda Brown, MD, Medical Director of Cabell Huntington Hospital School of Cytotechnology, Margene Smith, SCT, education coordinator, Carla Prater, CT, graduate of the program and employee of Cabell Huntington Hospital, Sue Boyd, CT, regional director of cytology for Lab Corps, David McIlvain, Director of Volunteer Services, Cabell Huntington Hospital, and Jennifer Perry, Chair and Program Director, Marshall University CLS Department. The committee meets once per academic year at Cabell Huntington Hospital. Problems with the clinical rotations, examination content and passage rates and other student issues are discussed as well as possible solutions to problems. If there are any curriculum changes, this is discussed and the clinical faculty has an opportunity for input.

2. **Graduates:**

All of the students that have graduated from the Cytotechnology Program are employed as a Cytotechnologist, and the majority of them are employed in the Tri-State region, Charleston, and in the state of West Virginia. There are also many positions open nationwide for cytotechnologists, which is appealing to student in the program. Additionally, the Labcorp facility in South Charleston often holds positions open in anticipation of new graduates.

According to the U.S. Department of Labor Bureau Occupational Outlook Handbook, in 2005 the median hourly wage for Cytotechnologists ranged from \$25.69 to \$31.64.

3. **Job Placement:**

There is a 100% job placement rate for students graduating from the CT program that seek employment in the field. Many are employed locally and nationwide.

### D. CONSISTENCY WITH UNIVERSITY MISSION:

Part of the mission of Marshall University is to educate health personnel for the state of West Virginia and the Tri-State region. The CT program is providing health care providers. As previously mentioned, most CT graduates practice in the Tri-State region. Since graduates received the clinical component of their education at local area hospitals, often these hospital vacancies are filled by Marshall University CT graduates.

The Clinical Laboratory Science Department CT Program does not have any unique relationships with other departments at Marshall. There are some shared courses that are taken with the nursing, dietetics, and communication disorders students including pre-requisites of human anatomy, human physiology, microbiology and general chemistry. The courses in the College of Health Professions are specific to their disciplines.

## Appendix I Required/Elective Course Work in the Program

Degree Program: Bachelor of Science in Cytotechnology Person responsible for the report: Jennifer D. Perry MS MT(ASCP)

Courses Required in Major (By Course Number and Title)	Total Required Hours	Elective Credit Required by the Major (By Course Number and Title)	Elective Hours	Related Fields Courses Required	Total Related Hours
CLS 100 Introduction to Health Professions	1	ENG 101 English Composition I	3	BSC 120 Principles of Biology I	4
CLS 460 Clinical Laboratory Supervision	3	ENG 102 English Composition II	3	BSC 227 Human Anatomy	4
CYT 438 Cytology Methodology	4	CMM 103 Fundamentals of Speech Communication	3	BSC 228 Human Physiology	3-4
CYT 430 Elementary Cytology	3	UNI 101 New Student Seminar	1	BSC 250 or BSC 302 Microbiology	4
CYT 440 Genital Cytology	6	PSY 201 General Psychology	3	BSC 300 Histology	4
CYT 441 Respiratory Tract Cytology	3	International Electives	6	BSC 322 Cell Biology	4
CYT 442 Cytology of Body Cavity	3	Multicultural Electives	3	MTH 127 or MTH 130 College Algebra	3
CYT 443 Urinary Cytology	3	Writing Intensive Elective	3	CHM 211 Principles of Chemistry I	2
CYT 444 Cytology of the Breast	3			CHM 217 Chemistry Lab I	3
CYT 445 Cytology of the GI Tract	3			CHM 212 Principles of Chemistry II	2
CYT 446 Cytology Research	1			CHM 218 Chemistry Lab II	3
CYT 447 Advanced Cytology Methods	3			PHY 201 Physics I	1
				PHY 202 Physics Lab I	3
				PHY 203 Physics II	1
				PHY 204 Physics Lab II	3
				MTH 122 Plane Trigonometry	3
				MTH 225 Statistics	3
				ECN 200 Introduction to Economics	3
				CHM 327 Introduction to Organic Chemistry	5
				or	9
				CHM 355 Organic Chemistry I	
				CHM 356 Organic Chemistry II	
				CHM 361 Introduction to Organic Lab	
<b>Total Hours</b>	<b>36</b>		<b>25</b>		<b>58-63</b>

Professional society that may have influenced the program offering and/or requirements:  
 American Society for Clinical Pathology (ASCP)  
 The Commission on Accreditation of Allied Health Education Programs (CAAHEP)  
 The Cytotechnology Programs Review Committee (CPRC)

(No more than **two** pages; Minimum type 8 point Arial)

## Appendix II Faculty Data Sheet

(for the period of this review)

Name: Dorothy J. Fike Rank: Professor

Status (Check one): Full-time  Part-time  Adjunct  Current MU Faculty: Yes  No

Highest Degree Earned: Master of Science Date Degree Received: August 1972

Conferred by: Cleveland State University

Area of Specialization: Biology (Research in Immunology)

MT(ASCP) American Society of Clinical Pathology  
CLS(NCA) National Credentialing Agency for  
Clinical Laboratory Science

Professional Registration/Licensure SBB(ASCP) Agency: American Society of Clinical Pathology

Years non-teaching experience 9.5  
Years of employment other than Marshall 26  
Years of employment at Marshall 13.5  
Years of employment in higher education 29  
Years in service at Marshall during this period of review 13.5

List courses you taught during the final two years of this review. If you participated in a team-taught course, indicate each of them and what percentage of the course you taught. For each course include the year and semester taught (summer through spring), course number, course title and enrollment.  
*(Expand the table as necessary)*

Year/Semester	Alpha Des. & No.	Title	Enrollment
2006/Fall	CLS 100	Introduction to Health Professions – taught 66% of course – team taught with Jennifer Perry	14
2006/Fall	CLS 110	Clinical Hematology	9
2006/Fall	CLS 285	Independent Study	1
2006/Fall	CLS 410	Advanced Hematology and Blood Bank	4
2006/Fall	CLS 460	Laboratory Management and Supervision	5
2007/Spring	CLS 210	Clinical Immunohematology	8
2007/Spring	CLS 310	Clinical Immunology and Molecular Diagnostics	4
2007/Spring	CLS 466	Diagnostic Physiology	4
2007/Spring	CLS 472 and 473	Advanced Clinical Practicum Hematology, Chemistry, Immunohematology, Microbiology – Coordinator for these	4
2007/Fall	CLS 100	Introduction to Health Professions	18
2007/Fall	CLS 110	Clinical Hematology	7
2007/Fall	CLS 410	Advanced Hematology and Blood Bank	3
2007/Fall	CLS 460	Laboratory Management and Supervision	5
2008/Spring	CLS 210	Clinical Immunohematology	7
2008/Spring	CLS 310	Clinical Immunology and Molecular Diagnostics	3

2008/Spring	CLS 466	Diagnostic Physiology	3
2008/Spring	CLS 472 and 473	Advanced Clinical Practicum Hematology, Chemistry, Immunohematology, Microbiology – Coordinator for these	3

**NOTE: Part-time adjunct faculty do not need to fill in the remainder of this document.**

- 1) If your degree is not in your area of current assignment, please explain.  
Not-applicable

**(For each of the following sections, list only events during the period of this review and begin with the most recent activities.)**

- 2) Activities that have enhanced your teaching and or research.  
How to use Effective Learning Environments to Motivate and Engage Students, MU (8/15/07)  
Preceptor Training: What's My Role? , MU (4/5/07)  
WAC re-certification workshop March 2007  
Online Course Pedagogy, MU 10/29/06  
Critical Thinking, MU (8/16/06)
- 3) Discipline-related books/papers published (provide a full citation).  
Comeaux and Fike Instructor's Guide Clinical Laboratory Hematology (Shirlyn B. McKenzie) 2003 Prentice Hall.
- 4) Papers presented at state, regional, national, or international conferences.  
Not applicable
- 5) Professional development activities, including professional organizations to which you belong and state, regional, national, and international conferences attended. List any panels on which you chaired or participated. List any offices you hold in professional organizations.

**Professional Organizations:**

American Society for Clinical Laboratory Science (ASCLS) – member of national scientific assemblies & receive Hematology request for consensus regarding educational & practice procedures  
American Society of Clinical Pathologists (ASCP)

**Meeting Attendance:**

Clinical Laboratory Educator's Conference, Savannah, Georgia – February 2008  
WVCLMA, WVSCLS, WVSSAMT Annual Meeting, Flatwoods, WV - October 2007  
ASCLS Annual Meeting, San Diego, CA – July 2007  
Clinical Laboratory Educator's Conference, Louisville, Kentucky – February 2007  
Northeast Laboratory Conference, Portland, Maine – October 2006  
WVCLMA, WVSCLS, WVSSAMT Annual Meeting, Flatwoods, WV – October 2006  
ASCLS Annual Meeting – July 2006  
WVCLMA, WVSCLS, WVSSAMT Annual Meeting, Flatwoods, WV – October 2005  
ASCLS Annual Meeting – July 2005  
WVCLMA, WVSCLS, WVSSAMT Annual Meeting, Flatwoods, WV – October 2004  
ASCLS Annual Meeting, Los Angeles, CA – July 2004  
ASCLS Annual Meeting, Philadelphia, PA – July 2003

- 6) Externally funded research grants and contracts you received.  
Not applicable
- 7) Awards/honors (including invitations to speak in your area of expertise) or special recognition.  
-“What can I Do with My Degree”, Tenth Annual Joint Meeting, WVCLMA, WVSCLS and WVSSAMT, October 19, 2007, Flatwoods, WV  
-“Beyond Lupus – Other Autoimmune Diseases”, Northeast Laboratory Conference, Portland, Maine, October 19, 2006  
-“Red Cell Antigens: What Function Do They Really Have?”, Northeast Laboratory Conference, Portland, Maine, October 18, 2006  
-Hypersensitivity Reactions”, Ninth Annual Joint Meeting, WVCLMA, WVSCLS and WVSSAMT, Flatwoods, WV, October 11, 2006  
-“What can I Do with My Degree”, Ninth Annual Joint Meeting, WVCLMA, WVSCLS and WVSSAMT, Flatwoods, WV, October 11, 2006  
-“Beyond Lupus – Other Autoimmune Diseases”, Eighth Annual Joint Meeting, WVCLMA, WVSCLS and WVSSAMT, Flatwoods, WV, October 14, 2005  
-Red Cell Antigens: What Function Do They Really Have?”, Seventh Joint Meeting, WVCLMA, WVSCLS and WVSSAMT, Flatwoods, WV, October 15, 2004  
“Wet vs. Dry: Teaching Blood Bank Problem Solving Techniques” ASCLS Annual Meeting, Los Angeles, CA, July 2004  
-Blood Bank Case Studies”, ASCLS Annual Meeting, Philadelphia, PA, July 2003
- 8) Community service as defined in the *Greenbook*.  
Faculty Affairs Committee  
Chair of International Committee  
General Education Committee

(No more than **two** pages; Minimum type 8 point Arial)

## Appendix II Faculty Data Sheet

(for the period of this review)

Name: Jennifer D. Perry Rank: Assistant Professor

Status (Check one): Full-time  Part-time  Adjunct  Current MU Faculty: Yes  No

Highest Degree Earned: Master of Science Date Degree Received: May 1999

Conferred by: Marshall University

Area of Specialization: Health Care Administration

Professional Registration/Licensure MT 195611/MLT 47319 Agency: ASCP

Years non-teaching experience 12  
Years of employment other than Marshall 12  
Years of employment at Marshall 3  
Years of employment in higher education 3  
Years in service at Marshall during this period of review 3

List courses you taught during the final two years of this review. If you participated in a team-taught course, indicate each of them and what percentage of the course you taught. For each course include the year and semester taught (summer through spring), course number, course title and enrollment. *(Expand the table as necessary)*

Year/Semester	Alpha Des. & No.	Title	Enrollment
2006/Fall	CLS 200	Clinical Biochemistry Lecture	9
2006/Fall	CLS 100	Introduction to Health Professions – team taught with Professor Dorothy Fike – taught approx. 33% of course	14
2006/Fall	CLS 421	Advanced Clinical Chemistry and Microbiology	4
2006/Fall	CLS 464	Laboratory Instrumentation	4
2006/Fall	CLS 270, 271, 272, 273	Clinical Practicum Hematology, Chemistry, Immunohematology, Microbiology – Coordinator for these	1
2007/Spring	CLS 200	Clinical Biochemistry Lecture	13
2007/Spring	CLS 220	Clinical Microbiology Lecture	8
2007/Spring	CLS 255	Clinical Laboratory Problems	8
2007/Spring	CLS 468	Clinical Laboratory Research	4
2007/Spring	CLS 499	Senior Seminar	4
2007/Summer	CLS 270, 271, 272, 273	Clinical Practicum Hematology, Chemistry, Immunohematology, Microbiology – Coordinator for these	6
2007/Fall	CLS 200	Clinical Biochemistry Lecture	7
2007/Fall	CLS 421	Advanced Clinical Chemistry and Microbiology Lecture	3
2007/Fall	CLS 464	Laboratory Instrumentation	3
2007/Fall	CLS 270, 271, 272, 273	Clinical Practicum Hematology, Chemistry, Immunohematology, Microbiology – Coordinator for these	2
2008/Spring	CLS 200	Clinical Biochemistry	7
2008/Spring	CLS 255	Clinical Laboratory Problems	7

2008/Spring	CLS 468	Clinical Laboratory Research	3
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**NOTE: Part-time adjunct faculty do not need to fill in the remainder of this document.**

1) If your degree is not in your area of current assignment, please explain.

- Not applicable

**(For each of the following sections, list only events during the period of this review and begin with the most recent activities.)**

2) Activities that have enhanced your teaching and or research – attendance at the following meetings/workshops:

- *CBAR and the Chronic Care Model*, Marshall University (4/21/08)
- *How to Use Effective Learning Environments to Motivate and Engage Students*, Marshall University, (8/15/07)
- *Preceptor Training: What's My Role?*, Marshall University (4/5/07)
- *Common Myths About Assessment*, Marshall University (4/4/07)
- *RealTime PCR*, Webcast, Marshall University (11/2/06)
- *Online Course Pedagogy*, Marshall University (10/29/06)
- *Selecting the Right BNP for Your Institution*, Audioconference, Marshall University (10/11/06)
- *Critical Thinking*, Marshall University (8/16/06)
- *Postanalytic Laboratory Errors: Cases, Concepts, and Interventions*, Webcast, Marshall University (12/15/05)
- *Grantmanship for New Researchers*, Marshall University (9/16/05)

3) Discipline-related books/papers published (provide a full citation).

- Perry, Jennifer D. MS, BSMT (ASCP) and Jean M. Chappell, MS, BSMT, "Vital Skills for Leaders", *Advance for Administrators of the Laboratory*, Vol. 16, Issue 3, p 26, March 2007.

4) Papers presented at state, regional, national, or international conferences.

- Not applicable

5) Professional development activities, including professional organizations to which you belong and state, regional, national, and international conferences attended. List any panels on which you chaired or participated. List any offices you hold in professional organizations.

**Educational Pursuits:**

- Currently pursuing Doctorate in Education Leadership with an emphasis in Higher Education Administration

**Professional Organizations:**

- American Society for Clinical Laboratory Science (ASCLS) – Board of Directors for WV Chapter – 2007-2008
- American Society of Clinical Pathologists (ASCP) – MLT and MT member
- American Association of Clinical Chemists (AACC) – 2002 member
- Clinical Laboratory Management Association (CLMA) – Board of Directors for State Chapter 2003-2005; WV state meeting Exhibitor Chairperson, 2004-2007; WV state meeting planning committee 2004-present

**Meeting Attendance:**

- Clinical Laboratory Educator's Conference, Savannah, Georgia – February 2008
- WVCLMA, WVSCLS, WVSSAMT Annual Meeting, Flatwoods, WV – October 2007
- Clinical Laboratory Educator's Conference, Louisville, Kentucky – February 2007
- WVCLMA, WVSCLS, WVSSAMT Annual Meeting, Flatwoods, WV – October 2006
- WVCLMA, WVSCLS, WVSSAMT Annual Meeting, Flatwoods, WV – October 2005

6) Externally funded research grants and contracts you received.

- Huntington Clinical Foundation - \$4891.00 – "Lipid Point of Care Testing Workshops as an Educational Tool for Marshall University College of Health Professions Students, April 2006

7) Awards/honors (including invitations to speak in your area of expertise) or special recognition.

- "Good" and "Bad" Cholesterol – an Interactive Learning Workshop – presentation – College of Health Professions Go Red for Heart Health Activities, February 2007.

8) Community service as defined in the *Greenbook*.

- Marshall University Booth Scholars Selection Committee – Sept. 2005 – April 2006
- CLS Department Scholarship Committee – Sept. 2005 – present
- College of Health Professions Curriculum Committee – January 2006 – present
- Wear Red For Heart Health Committee – January 2006 – present
- Marshall University Faculty Senate – 2006 – present
- Marshall University SCORES Committee – August 2006 – present
- College of Health Professions Faculty Organization Secretary – 2006 -2008
- CLS Faculty Search Committee – member 2007; chair 2007-2008
- MCTC Clinical Assistant Faculty Search Committee – May 2007 – August 2007
- College of Health Professions Online Learning Committee – August 2007 – present
- Marshall University Graduate College Doctoral Seminar Planning Committee – March 2008 - present

(No more than **two** pages; Minimum type 8 point Arial)

## Appendix II Faculty Data Sheet

(for the period of this review)

Name: Thomas M. Stevens Rank: Clinical Instructor

Status (Check one): Full-time  Part-time  Adjunct  Current MU Faculty: Yes  No

Highest Degree Earned: Bachelors of Science Date Degree Received: December 2006

Conferred by: Marshall University

Area of Specialization: Medical Technology

Professional Registration/Licensure 04153412 Agency: ASCP

Years non-teaching experience	<u>8</u>
Years of employment other than Marshall	<u>8</u>
Years of employment at Marshall	<u>1.5</u>
Years of employment in higher education	<u>1.5</u>
Years in service at Marshall during this period of review	<u>1.5</u>

List courses you taught during the final two years of this review. If you participated in a team-taught course, indicate each of them and what percentage of the course you taught. For each course include the year and semester taught (summer through spring), course number, course title and enrollment. *(Expand the table as necessary)*

Year/Semester	Alpha Des. & No.	Title	Enrollment
Spring 2007	CLS 200	Clinical Biochemistry LAB	13
Fall 2007	CLS 200	Clinical Biochemistry LAB	7
Fall 2007	CLS 421	Advanced Microbiology/Chemistry LAB	3
Fall 2007	CLS 110	Clinical Hematology Lab (50% team taught)	7
Spring 2008	CLS 220	Clinical Microbiology	7
Spring 2008	CLS 200	Clinical Biochemistry Lab	7

**NOTE: Part-time adjunct faculty does not need to fill in the remainder of this document.**

- 1) If your degree is not in your area of current assignment, please explain.  
- **Not applicable**

**(For each of the following sections, list only events during the period of this review and begin with the most recent activities.)**

- 2) Activities that have enhanced your teaching and or research.  
- **Mycology – Fungal media Research Project , Marshall University & St. Mary's Medical Center, Spring 2006**
- 3) Discipline-related books/papers published (provide a full citation).  
- **Not applicable**
- 4) Papers presented at state, regional, national, or international conferences.  
- **Not applicable**

- 5) Professional development activities, including professional organizations to which you belong and state, regional, national, and international conferences attended. List any panels on which you chaired or participated. List any offices you hold in professional organizations.
- Professional Organizations:**
- **American Society for Clinical Laboratory Science (ASCLS)**
  - **American Society of Clinical Pathologists (ASCP) – MLT and MT member**
  - **American Heart Association (CPR)**
- 6) Externally funded research grants and contracts you received.
- **Not applicable**
- 7) Awards/honors (including invitations to speak in your area of expertise) or special recognition.
- **Mary S. George Memorial Scholarship, Marshall University, May 2006**
  - **Research Scholars Award, Marshall University, May 2006**
- 8) Community service as defined in the *Greenbook*.
- **Not applicable**



1) If your degree is not in your area of current assignment, please explain.

**(For each of the following sections, list only events during the period of this review and begin with the most recent activities.)**

- 2) Activities that have enhanced your teaching and or research.
- 3) Discipline-related books/papers published (provide a full citation).
- 4) Papers presented at state, regional, national, or international conferences.
- 5) Professional development activities, including professional organizations to which you belong and state, regional, national, and international conferences attended. List any panels on which you chaired or participated. List any offices you hold in professional organizations.
- 6) Externally funded research grants and contracts you received.
- 7) Awards/honors (including invitations to speak in your area of expertise) or special recognition.
- 8) Community service as defined in the *Greenbook*.

## Appendix V Program Course Enrollment

Course Number (e.g. 215*)	Course Name	Required/ Elective	Year 1 2003-2004			Year 2 2004-2005			Year 3 2005-2006			Year 4 2006-2007			Year 5 2007-2008		
			Su	Fa	Sp	Su	Fa	Sp	Su	Fa	Sp	Su	Fa	Sp	Su	Fa	Sp
CYT 438	Cytology Methodology	R	3			3			0			2			1		
CYT 439	Elementary Cytology	R	3			3			0			2			1		
CYT 440	Genital Cytology	R		3			3			0			2			1	
CYT 441	Respiratory Tract Cytology	R		3			3			0			2			1	
CYT 443	Urinary Cytology	R		3			3			0			2			1	
CYT 446	Cytology Research	R		3			3			0			2			1	
CYT 442	Cytology of the Body Cavity	R			3			3			0			2			1
CYT 444	Cytology of the Breast	R			3			3			0			2			1
CYT 445	Cytology of the GI Tract	R			3			3			0			2			1
CYT 447	Advanced Cytology Methods	R			3			3			0			2			1

(Note: If you listed courses in Appendix IV, do not list them again in this appendix.)

\* Indicate all courses other than the service courses here. Please include all special topics courses offered as well as independent studies. When listing Independent studies, please list the **number of independent study students enrolled**, but **DO NOT** include individual names or the titles of the independent studies.

*Expand table as needed.*

## Appendix VI Program Enrollment

Students	Year 1 2003-2004	Year 2 2004-2005	Year 3 2005-2006	Year 4 2006-2007	Year 5 2007-2008
New Students Admitted (BS in Cytotechnology)	3	3	0	2	1
BS in Cytotechnology Majors	6	3	1	3	1
<b>Grand Total of Students Enrolled in the Program</b>	6	3	1	3	1
<b>Graduates of the program</b>	3	3	0	1	1

\*If known. This information is not completely accurate at this time, as students often do not declare a second major until the junior evaluation or the student has her/his primary major in another college.

\*\*On occasion you may have a student enrolled in your program who is declaring your program as a 3<sup>rd</sup> major.

\*\*\*If known. This information is not completely accurate at this time, as students often do not declare minors until the junior evaluation or senior application for graduation.

**Chart I Assessment Summary**  
**Marshall University**  
**Assessment of Student Outcomes: Component/Course/Program Level**  
 5 year summary

**Component Area/Program/Discipline: BS in Cytotechnology**

<b>Component/Course/Program Level</b>				
<b>Student Learning Outcomes</b>	<b>Assessment Measures (Tools)</b>	<b>Standards/Benchmark</b>	<b>Results/Analysis</b>	<b>Action Taken</b>
<p><i>Clinical Practicum Outcome:</i> The student will analyze and interpret data to prepare them for entry into the workforce as a Cytotechnologist.</p>	<p>American Society of Clinical Pathology Board of Registry Examination in Cytotechnology</p>	<p>80% of students pass national examination annually</p>	<p>2003 – 100% (n=4)            2004 – 100% (n=4)            2005 – 67% (n=3)            2006 – NA (n=0)            2007 – 100% (n=4)</p>	<p>Given the extremely small number of students taking the examination, the passage rates are greatly affected by any student that fails. Overall for the five year period, the MU passage rate was 91.75% with only 15 students taking the exam; compared to the national average for the same period of 87% for 1384 test takers</p>

Office of Assessment & Program Review

April 1, 2008

Jennifer Perry, Chair  
Clinical Laboratory Sciences  
COHP

Dear Jennifer,

The University Assessment Committee and I have completed our evaluation of the annual program assessment report for the BS in Cytotechnology. This letter will provide feedback in the following manner. First, I will comment generally on each section of your report. Second, I will rate the following areas of the report on a four point scale (0 – 3, with 3 being the highest rating): student learning outcomes, assessment measures, and the feedback loop. Although I considered feedback from committee members, I made the final decision on ratings for all reports submitted. Third, I will offer suggestions for your consideration as you plan your assessment for the 2008-2009 academic year. Fourth, I will include my evaluation using the Primary Traits Analysis rubric and will include reviewers' comments for your information.

General Comments

I realize that this program is administered off campus and so a cooperative effort between campus and off-campus faculty must occur to have a successful assessment effort. To date, you have specified appropriate program goals. Additionally, your students' 100% pass rate on the National cytotechnologist BOR Exam on the first attempt suggests that the program is accomplishing its goal of preparing students to be competent cytotechnologists.

Ratings for Student Learning Outcomes, Assessment Measures, and the Feedback Loop

Student Learning Outcomes = 1. This rating was given because the student learning outcome you identified is appropriate and describes student behaviors. To move to level 2 you need to develop additional student learning outcomes for your program.

Assessment Measures = 1. This rating was given because you identified one measure (the BOR exam), which did relate to your student learning outcomes. To move to level 2, you should develop additional measures to appropriately assess the student learning outcomes you develop. Although most of the measures you use should be direct in nature, you should supplement these with some indirect measures, e.g. appropriate questions from student, graduate, and employer satisfaction surveys. The measures you use should be integrated into the curriculum.

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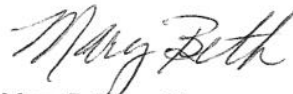
Feedback Loop = 0. The feedback loop was not described. Do you get specific feedback from the BOR exam regarding specific areas of practice? If this is the case, you may be able to use this information to identify specific strengths and weaknesses, which could be used to improve student learning.

Suggestions to Consider as you plan your assessment strategies for the 2008-2009 academic year

For the coming year, I would suggest that your faculty work with the off-campus faculty to identify the student learning outcomes for the program. It's a good idea to think of these as the competencies students should have when they complete your program. I suggest writing these in the following way, "Upon completion of the BS in Cytotechnology, students will be able to ..." Then list the competencies students should have. Try to use action verbs and make sure that student learning outcomes focus on the higher domains of thinking, i.e. analysis, synthesis, and evaluation.

If I can be of help as you move forward with the development of your assessment plan, please do not hesitate to contact me at 62987 or at [reynoldm@marshall.edu](mailto:reynoldm@marshall.edu).

Sincerely,



Mary E. Reynolds  
Interim Director of Assessment

C: Dr. Shortie McKinney, Dean, COHP



w w w . m a r s h a l l . e d u

Office of Academic Affairs

October 12, 2007

Dee Fike, Chair  
Clinical Laboratory Science  
COHP  
Campus

Dear Dee,

The Subcommittee on Assessment Reports completed its review of your annual assessment report for the BS in Cytotechnology and I concur with their analysis.

The BS in Cytotechnology is performing at Level 0 in the area of Learning Objectives and at Level 1 in the areas of Assessment Measures and the Feedback Loop.

In the area of Learning Objectives, Level 0 suggests that learning objectives were not identified. For example, "2004-2005 class of students adequately prepared," is not a student learning objective (outcome). What are students adequately prepared to do? You might say, "Students will [specify skill or area of knowledge and how they will demonstrate it] during [name learning experience]."

In the area of Assessment Measures, Level 1 suggests that measures were identified. However, many of the measures you identified are not appropriate to measure student learning outcomes. These include graduation rates. Also, I couldn't interpret "performance records." These were not described. Exams with national norms are appropriate, but you did not tie performance on these tests to measurable student learning outcomes. I was glad to see that you used student and employer satisfaction surveys. These give the program good data, but remember that data from surveys is indirect in nature. These data measure students' (or employers') perceptions, but are not direct measures of student learning.

In the area of the Feedback Loop, Level 1 suggests that data are being collected, but not interpreted or used for improvement in student learning. As mentioned in the previous paragraph, some of the data you reported give no useful information about student learning.

It is obvious to me that you put a good deal of time and effort into preparing this report. However, the report is focused more on program productivity, e.g. enrollment, etc. than on student learning. It is important that you reflect on the most important competencies (learning outcomes) students must have when they complete this program and then think about how you can accurately measure whether or not students achieve these competencies. Dr. Mary Beth Reynolds, the new Interim Director of Assessment, will be happy to help you in developing your assessment plan. She can be contacted at 62987 or at [reynoldm@marshall.edu](mailto:reynoldm@marshall.edu).

Sincerely,

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Frances S. Hensley  
Associate Vice President for Academic Affairs

C: Dr. Shortie McKinney, Dean, COHP

Office of Program Review & Assessment

To: Dee Fike, Chair, Department of Clinical Lab Sciences  
From: Bob Edmunds, Coordinator for Program Review and Assessment  
Date: September 22, 2005



**Yearly Assessment Report for: BS Cytotech Cytotechnology**

Thank you for submitting the Yearly Assessment Report for the program. Please use the information in this report to guide your assessment activities during AY 2005-2006.

The Yearly Assessment Report for documenting AY 2004-2005 assessment activities is due by October 3, 2005. If the program is scheduled for a program review during the 2005-6 academic year, the Program Review will suffice as the documentation of assessment activities and no separate report will be due.

**Reviewer summary of yearly assessment report:**

What follows is a brief critique of the report you submitted for the academic year 2003-2004. In most cases the report has been reviewed by 3 members of the University Assessment Committee.

Yearly Assessment Report Critique	
I. a. Program goals:	The program goals were attached. Although, they may have been mis-numbered, or some were inadvertently left out.
b. Learning outcomes and data collection:	The learning outcomes were not listed as measurable student academic achievement outcomes. Data were collected on the outcomes listed.
c. Results:	The program had 100% passage rate on the licensure test.
II. BOT Initiative #3:	Meets BOT #3 with the licensure test.
III. Plans for current year:	Improve objectivity of exit surveys. Please let this office know what you wish to do.
IV. Assistance needed:	Listed, but none of which this office could be of any assistance.
V. Lessons learned:	Visibility of the program would help.

**Review of the Assessment Summary Chart "Marshall University: Assessment of Student Outcomes."**

This chart will help the program and the University Assessment Committee monitor a program's patterns of evidence. Please remember that a program does not have to assess every outcome every year; however, within a 3-4 year period of time all program objectives must be evaluated, results analyzed, and actions taken (feedback loop) documented.

The chart needs to be summarized in one location. It was parceled out over the entire document. Students generally met the outcomes and no immediate changes were indicated.

**Efficacy of Assessment:**

As Marshall approaches its ten year self-study by the North Central Association's Higher Learning Commission, programs will be measured in terms of their efficacy of assessment. Programs are evaluated in terms of the development of measurable learning outcomes, the use of viable assessment measures, and the implementation of an effective feedback loop. The current report has been evaluated based on these categories. This year the report shows program scores from 2000-2001 to the present.

<b>Scores:</b>				
<b>Categories</b>	<b>Scores</b>			
	<b>2000-2001</b>	<b>2001-2002</b>	<b>2002-2003</b>	<b>2003-2004</b>
I. Learning Outcomes	1	1	1	2
II. Assessment Measures	1	2	1	3
III. Feedback Loop	2	2	2	2
<b>Total Overall Score:</b>	<b>4</b>	<b>5</b>	<b>4.7</b>	<b>6.5</b>
Level of Implementation (efficacy of assessment)	2	2	2	2

<b>Score Ranges</b>	
Score Ranges 0-3 in each of the three categories	A score of 0 indicates minimum activity in the category
	A score of 1 indicates that a program is in the beginning stages of assessment
	A score of 2 indicates that a program is making progress toward implementing a viable assessment program
	A score of 3 indicates that a program is in the maturing stages of its assessment program

<b>Levels of Implementation Efficacy of Assessment</b>	
A total overall score between 0 and 3 indicates	Level 1: the program is in the beginning stages of its assessment of student academic achievement
A total overall score between 4 and 6 indicates	Level 2: the program is making progress toward implementing a viable assessment program
A total overall score between 7 and 9 indicates	Level 3: the program is in the maturing stages of continuous improvement of student academic achievement
<b>The goal is to have the majority of our programs in level 3 by May 2006.</b>	

**Interpretation:**

The program has rated at Level 2 for the past 4 years. Because of the nature of the program, some specific data is not obtainable. However, licensure data is available. The program had 3 complete the program and all 3 passed the licensure test. The program may wish to reconsider some of its learning outcomes. Few of them are stated in measurable terms. Some relate to admissions, and graduate and employment outcomes which, while important, do not measure student academic achievement. The Licensure test is an appropriate test of the program.

**Recommendations:**

The program should strive to develop measurable student academic achievement outcomes. Otherwise, the program is doing a good job preparing its students for the workplace.

**General Comments:**

It is imperative that programs maintain a record of their assessment activities and have this information available for the NCA/HLC site committee if requested.

Thanks so much for continuing to aid Marshall in its ongoing assessment efforts.

Enclosures

od

Office of Program Review & Assessment  
 To: Professor Dee Fike, Chair, Clinical Lab Sciences  
 From: Bob Edmunds, Coordinator for Program Review and Assessment  
 Date: July 8, 2004



Subject: Yearly Assessment Report, BS Cytotechnology

1. Thank you for submitting the Yearly Assessment Report for the program, BS Cytotechnology. Please use the information in this report to guide your assessment activities during AY 2004-2005.

2. What follows is a brief critique of the report you submitted for the academic year 2002-2003.

I. Principal Elements of the assessment plan	The summary of assessment activities is confusing. The use of surveys by the Accredited programs—UAC is assuming that the accredited programs are at Cabell Huntington Hospital and CAMC in Charleston? This is unclear.
Student outcomes	The outcomes do not relate to student academic achievement. The chart is vague. What types of requirements are in place before a student is admitted to an accredited program?
Assessment Tool or Approach/ Standards/Benchmark BOT Initiative #3	The Assessment tools are not oriented towards student academic achievement—"Informal discussions" don't appear to be grounded in quality of a students work.
Results/Analysis:	Students are admitted to the Cytotech programs.
Action Taken:	None for the most part. Surveys will be used in 2004.
Information on how assessment data is used to improve program quality (3 examples)	Other than the lack of surveys and that remedy, nothing else is listed.
Chart	A chart is present.

3. Review of the Assessment Summary Chart "Marshall University: Assessment of Student Outcomes."

This chart will help the program and the University Assessment Committee monitor a program's patterns of evidence. Please remember that you do not have to assess every outcome every year; however, within a 3-4 year period of time all program objectives must be evaluated, results analyzed, and actions taken (feedback loop) documented.

The chart is present. The outcomes are not very specific. Probably outcome 2 is the most useful. How do you determine that the students are prepared? I would believe that this would be the most crucial of the outcomes. Outcomes 3 and 4 are attitudinal. While this important, academic preparation is equally important. How does the program measure academic competency? Perhaps outcome #2 could be expanded to include the elements of the pre-cytotechnology requirements.

4. Efficacy of Assessment:

As Marshall approaches its ten year self—study by the North Central Association's Higher Learning Commission, programs will be measured in terms of their efficacy of assessment. Programs are evaluated in terms of the development of measurable learning outcomes; the use of viable assessment measures and the implementation of an effective feedback loop. The current report has been evaluated based on these categories. Scores can range from 0-3 in each category. Overall total scores ranging from 1-3 indicate that the program is in the Beginning Stages of developing a viable assessment program. Overall scores ranging from 4-6 indicate that a program is making progress toward implementing a viable assessment program and overall scores ranging from 7-9 indicate that a program is in the maturing stages of continuous improvement. All programs should be in Level 2 (overall score 4-6) (Making progress toward implementing a viable assessment program) or Level 3 (overall score 7-9) (Maturing stages of continuous improvement) by May 2005.

Scores:	
I. Learning Outcomes	1
II. Assessment Measures	1
III. Feedback Loop	2
Overall Score:	4.7

Interpretation: With an overall score of 4.7, the program is in Level 2, of the NCA/HLC levels of implementation. The program is making progress towards implementing a viable assessment program. As you can see from the remarks of the reviewers, there was some confusion as to what was being done by the program. Since this is a unique program on Marshall's campus, the type of assessment program is different than the normal program. It might be a good idea to concentrate efforts on the 'pre-' part of the program and the student competencies required for acceptance into the hospital/clinical program. And a final piece of the assessment program would be to record the success of students as they matriculate from the University with a degree in Cytotechnology. More specific results will need to be collected.

The program should revisit the learning outcomes and assessment measures. "Informal discussions" should be replaced with more concrete examples of student performance.

5. Recommendations:

This program has been a MU for a long time and has been a partnership program from the start. Perhaps assessment efforts for this program should be centered on the preparation for the student to be admitted to the area hospitals accredited programs. What are the requirements for admission to the program and how well are our students meeting those requirements?

6. General Comments:

It is imperative that programs keep a record of their assessment activities and have this information available for the NCA/HLC site committee if requested.

7. Thanks so much for continuing to aid Marshall in its ongoing assessment efforts.

Enclosures