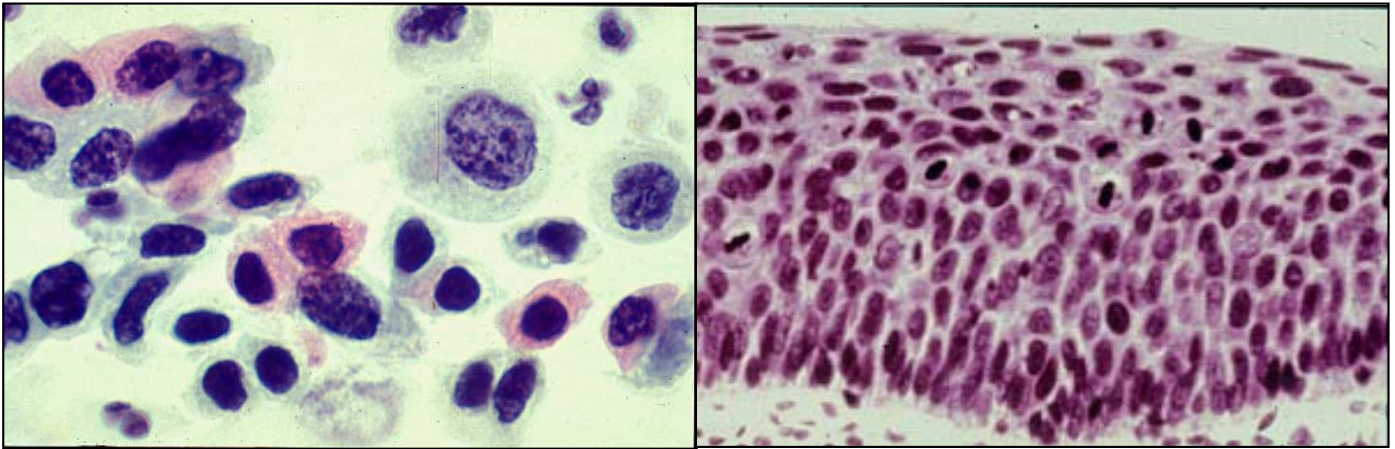


Cytotechnology /Cell Sciences

Clinical Practicum Handbook



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**THOMAS JEFFERSON UNIVERSITY
JEFFERSON SCHOOL OF HEALTH PROFESSIONS
DEPARTMENT OF BIOSCIENCE TECHNOLOGIES
PROGRAM IN CYTOTECHNOLOGY/CELL SCIENCES**

COURSE NUMBERS AND TITLES:

(Students enrolled in one-year Baccalaureate Program register for these courses for the academic terms indicated)

CT 412 Cytotechnology Practicum I	- 4 credits Summer I Term
CT 413 Cytotechnology Practicum II	- 4 credits Summer I Term
CT 414 Cytotechnology Practicum III	- 4 credits Summer II Term
CT 415 Cytotechnology Practicum IV	- 4 credits Summer II Term

(Students enrolled in the one-year Professional Master of Science program register for these courses for the academic terms indicated)

LS 812 Practicum I-03: Cytopathology	- 2 credits Summer I Term
LS 813 Practicum II-03: Cytopathology	- 2 credits Summer I Term
LS 814 Practicum III-03: Cytopathology	- 2 credits Summer II Term
LS 815 Practicum IV-03: Cytopathology	- 2 credits Summer II Term

(Senior students enrolled in the two-year Baccalaureate Program register for these courses for the academic terms indicated)

CT 412 Cytotechnology Practicum I	- 4 credits Fall Semester, Senior Year
CT 413 Cytotechnology Practicum II	- 4 credits Fall Semester, Senior Year
CT 414 Cytotechnology Practicum III	- 4 credits Spring Semester, Senior Year
CT 415 Cytotechnology Practicum IV	- 4 credits Spring Semester, Senior Year

(Year 2 students enrolled in the two-year Master of Science Program or Advanced Masters program register for these courses for the academic terms indicated)

LS 812 Practicum I-03: Cytopathology	- 2 credits Fall Semester
LS 813 Practicum II-03: Cytopathology	- 2 credits Fall Semester
LS 814 Practicum III-03: Cytopathology	- 2 credits Spring Semester
LS 815 Practicum IV-03: Cytopathology	- 2 credits Spring Semester

PROGRAM DIRECTOR:

Shirley E. Greening, MS, JD, CT(ASCP), CFIAC

Contact Numbers: tel: 215-503-8561
fax: 215-503-2189
email: shirley.greening@jefferson.edu

Program Contact Number } call **215-503-7841** to report latenesses, sick time, emergencies

2011-13 ACTIVE CLINICAL AFFILIATE SITES and CLINICAL INSTRUCTORS:

1. Abington Memorial Hospital	Amanda Capuzzi Mahoney
2. Albert Einstein Medical Center	Carol Porter/Ngan Tran
3. American Oncologic Hospital/Fox Chase Cancer Center	Joseph Clarici
4. Atlanticare Regional Medical Center - Atlantic City, NJ	Diane Schellhas, Lisa Lai
5. Cooper Hospital/University Med. Ctr, Camden, NJ	Jennifer Pirolli McErlane
6. Doctors Pathology Services, Dover, DE	Jenna Murfree, J. Brady, K. O'Keefe
7. Hospital of the University of Pennsylvania	A. Wright, S. Slott, C. Skotnicki
8. Jeanes Hospital	Carl Kern; Lea Alminde
9. John F. Kennedy Memorial Hospital - Cherry Hill, NJ	Mona Moosavi
10. Mercy Fitzgerald Hospital, Darby, PA	Kelly Doxzon
11. MLHS-Lankenau Hospital	Mary Cahalan
12. Pennsylvania Hospital	Eugene Smith
13. Quest Diagnostics, Inc. - Horsham, PA	Michael Martinak
14. Quest Diagnostics, Inc. - Mt. Laurel, NJ	Scott Slimm
15. Quest Diagnostics, Inc. - Teterboro, NJ	Cheryl Cereso; Marlene Daniels
16. Tenet-Hahnemann University Hospital	Catherine DeWitt
17. Temple University Hospital	Michael Carrozza; Deborah Eden
18. Thomas Jefferson University Hospital	Clementine Hawthorne

COURSE DESCRIPTION:

Clinical internships in a variety of cytopathology laboratories. Students participate in all phases of diagnostic service work and laboratory functions (pre-analytical, analytical, and post-analytical), which may include continuing education and in-service programs, adjunct diagnostic technologies and attendance at specimen collection procedures.

PHILOSOPHY:

Integration of prior didactic and classroom laboratory education into varied clinical settings prepares students to become effective, professional cytotechnologists. The attributes of a professional cytotechnologist encompass more than those of diagnostic expertise. Health professionals must be accountable not only for knowledge within their laboratory specialty, but for demonstrating dependable, ethical and disciplined behavior in order to deliver optimal patient care.

OBJECTIVE(S):

During the Clinical Practicums, students must be able to demonstrate competence in diagnosing cytologic cases, which includes appropriate documentation of these case reviews. Students must also exhibit appropriate behaviors with respect to interpersonal relationships, dependability, integrity and professionalism. Students will have met the objectives of the Clinical Practicum courses by demonstrating competence in:

- ✓ conducting themselves in accordance with laboratory policies and procedures at each clinical site.
- ✓ exposure to and responsibility for professional behavior of a practicing Cytotechnologist.
- ✓ exposure to and supervised work responsibility in the cytopreparatory laboratory, including adjunct diagnostic technologies where available and appropriate.
- ✓ accountability for accurate, *independent* pre-diagnosis and case documentation of gynecologic and non-gynecologic cytology specimens, including fine needle aspirations.
- ✓ participation in staff review of cytologic specimens with Cytotechnologists and Cytopathologists.
- ✓ observation of and participation in laboratory organization, including manual and/or computerized record keeping and reporting systems, histologic correlation, quality control and quality assurance procedures and documentation methods, and personal interactions.

COURSE REQUIREMENTS:

Students are required to achieve and maintain pre-determined levels of competence for detector and locator skills, diagnostic accuracy, technical proficiency, professionalism and correlation of theoretical and practical learning during their course of study, including the clinical practicum. Criteria and further explanation of these components can be found in specific sections of this Handbook. [Grades for the Clinical Practicums are based on:](#)

- 1. Diagnostic accuracy, as determined by the level of proficiency on and documentation of daily casework, as assessed by Program Faculty; and**
- 2. Non-diagnostic technical performance and professionalism, as assessed by Clinical Faculty**

1. Evaluation of Diagnostic Accuracy of Daily Casework:

Diagnostic Accuracy is assessed using a weighted system that assigns scaled points based on the student's diagnosis compared to the reviewer's target diagnosis. During the Clinical Practicums, it is the responsibility of the student to request review of any case(s) for which the student believes he/she has received inadequate consultation, review or feedback.

Required workloads or quota systems are discouraged as a standard of evaluation during the Clinical Practicums. However, to maintain reasonable diagnostic efficiency and to insure that detector/locator and diagnostic interpretive skills are maintained, students should pace their daily microscopic work according to the following schedule:

<i>Fall Semester</i> <i>Summer I</i>	CT 412/413/812/813: (minimum 30 slides) ie: ~30 gyn cases or ~8 nongynecologic cases per day
<i>Spring Semester</i> <i>Summer II</i>	CT 414/415/814/815: (minimum 45 slides) ie: 45 gyn cases/12 nongynecologic cases per day

By the last clinical practicum, students must be able to demonstrate an average proficiency rate of at least 5 slides per hour.

Effect of Workload on Grading in Clinical Practicum Courses:

Laboratory workload variations and client/case mix determine the quantity and variety of cases available for routine diagnostic microscopy. When quantity of routine cases is reduced, students are strongly encouraged to supplement the target number of cases by reviewing special cases (such as study sets or previously diagnosed cases) as made available by the Clinical Instructor(s).

As a general rule, the actual workload completed by the student will not influence the final grade. This standard will prevail where students have made a good faith effort to conform to the suggested workload guidelines. However, where students could reasonably be expected to meet the workload guidelines, the number of cases completed may be considered in determining whether students have met or not met the technical competencies (as listed in the Technical/Professional Evaluation). Student initiative in reviewing supplementary cases (as suggested, above) is evaluated under items **K.** and **U.** of the Technical/Professional Evaluation.

The Program Director or her/his designee reviews all clinical documents and computes Clinical Summary Evaluations.

2. Evaluation of Technical and Professional Performance:

Professional behavior and non-diagnostic technical performance are evaluated using an instrument designed to reflect the Description of the Program, of the *Standards and Guidelines for Cytotechnology Programs (2004)*, and the *Curriculum in Cytotechnology Entry-Level Competencies (2005)*. The *Entry-Level Competencies* outline performance levels students are expected to achieve on completion of their cytotechnology program.

3. Concurrent Course: LS 416 or LS 816: Comprehensive Examination

LS 416/816 is designed as a web-based review and practice examination activity, leading to administration of a modified computer adaptive Comprehensive Examination in the subject area. Students complete readings and submit scheduled quizzes/exams for Instructor evaluation and readiness assessment. Students unable to perform at a minimum level of competence at 4-week intervals can expect to be assigned additional readings, review sources, and/or practice quizzes/tests. **Graduate students are expected to complete at least two (2) additional essay test modules during the semester, and complete an additional essay component on the comprehensive exam.**

Course Objective for LS 416: On successful completion of this course, students will demonstrate acquisition of knowledge in their discipline at a level sufficient to assure a reasonable expectation of passing their respective national certification and/or qualification examination(s).

Course Objectives for LS 816: On successful completion of this course, graduate students will (1) demonstrate acquisition of knowledge in their discipline at a level sufficient to assure a reasonable expectation of passing their respective national certification and/or qualification examination(s); and (2) demonstrate critical thinking, reasoning and writing skills by completing essays on routine and problematic issues in molecular, cytopathology laboratory techniques, diagnosis, quality assurance and regulatory requirements.

COURSE GRADING:

The numerical range for grades in the Clinical Practicums is considerably more stringent than the range for academic coursework. A high level of diagnostic accuracy is essential to Cytotechnology practice. Contemporary methods to collect, examine and diagnose cytologic specimens do not assure that all specimens will be interpreted correctly. However, to minimize the occurrence of errors in cytologic interpretation, it is essential that Cytotechnologists (and therefore Cytotechnology students) strive to achieve the highest level of accuracy attainable using current technology and knowledge. The expected level of technical performance and professional behavior is correspondingly high, to reflect the importance of integrity, judgment and skill required in dealing with patient materials and with other health care practitioners.

For the each of the components the grading scale is:

Grade	Diagnostic Micro. Component	Technical/Profes. Component	Quality Points for Computation	Final Quality Point Range=	Final Grade
A+	≥100	≥100	4.00	4.00	A+
A	99 - <100	99 - <100	4.00	4.00	A
A-	98 - <99	98 - <99	3.7	3.7 - <4.00	A-
B+	97 - <98	97 - <98	3.3	3.3 - <3.7	B+
B	96 - <97	96 - <97	3.00	3.00 - <3.3	B
B-	95 - <96	95 - <96	2.7	2.7 - <3.00	B-
C+	93 - <95	93 - <95	2.3	2.3 - <2.7	C+
C	91 - <93	91 - <93	2.00	2.00 - <2.3	C
C-	90 - <91	90 - <91	1.7	1.7 - <2.00	C-
D+	88 - <90	88 - <90	1.3	1.3 - <1.7	D+
D	86 - <88	86 - <88	1.00	1.00 - <1.3	D
D-	85 - <86	85 - <86	0.7	0.7 - <1.00	D-
F	<85	<85	0.00	0.00	F
Weight:	60%	40%			

COMPUTATION OF FINAL GRADE:

A separate percentage grade is calculated for each clinical practicum course. Percentage grades for each evaluation component (diagnostic, technical/professional) are determined based on performance in each of the components. The percentage component grades are then converted to letter grades and assigned quality points as indicated in the table above. Quality points are multiplied by the weight for each component and then totaled. The total quality points determine the final letter grade for the clinical course. An example of a final clinical grade computation is:

	Percent Earned:	Letter Equivalent:	Q.P.	x	=	=	Final Grade
Diagnostic Microscopy:	95.32%	B-	2.7	.60		1.620	
Technical/Professional:	97.64%	B+	3.3	.40		<u>1.320</u>	
						2.940	= B-

Grades for Practicum courses are not rounded.

The minimum passing grade for individual clinical courses is a **C- for undergraduate students; B- for graduate students**. Undergraduate students are required to maintain a GPA of at least 2.00; graduate students are required to maintain a GPA of at least 3.00. See the School *Catalog* for further information regarding program requirements on academic performance.

DEPARTMENT POLICIES APPLICABLE TO CLINICAL LABORATORY PRACTICE

Definitions:

Unsafe conduct: action(s) which poses a potential threat to the well-being, health or safety of patients, faculty, health care workers, fellow students, or self.

Unprofessional conduct: malicious, intentional or negligent action(s) which fall below, compromise or disregard the practice and ethical standards of the professional discipline, the health care community, and/or the educational climate.

Unsatisfactory performance: knowledge, skill(s) and/or time-in-practice insufficient to meet the minimum competencies, objectives, performance criteria, or scheduled experiences of the clinical practicum.

The determination of unsatisfactory performance, unprofessional conduct or unsafe conduct will be made by the faculty, who will determine when or if a student will be removed from or return to clinical or laboratory practice, the condition(s) for doing so, and the level of clinic or laboratory activity permitted. Depending on the severity of the incident(s) and/or number of prior incidents, the faculty's sanctions may result in dismissal from the program and/or department; repeating the clinical course; mandatory clinical time extensions; and/or remedial instruction prior to readmission to the department or re-entry into clinical or laboratory courses.

Department recommendations for dismissals based on clinical performance are subject to review and approval by the Committee on Student Affairs. Students who wish to appeal a Departmental action, including a Departmental or Program dismissal, may do so by following the provisions of the Grade Appeal Protocol (*see School Catalog, and Student Handbook*)

POLICY FOR UNPROFESSIONAL OR UNSAFE CLINICAL LABORATORY CONDUCT

To successfully complete each clinical course, students are expected to demonstrate clinical and laboratory competencies consistent with the policies and standard procedures taught in program courses and described in course syllabi, the School's Catalog and *Student Handbook*, and the Clinical Practicum Handbook. If, in the judgment of a clinical and/or program faculty member, the student demonstrates behavior that is detrimental to the well-being of patients, fellow students, faculty members or him/herself, the student's clinical laboratory activities will be terminated immediately. Examples of such unprofessional or unsafe conduct include, but are not limited to:

- (1) tampering with, destruction or theft of equipment, specimens or teaching materials;
- (2) verbally abusive, physically threatening or harmful behavior;
- (3) falsification of documentation (laboratory or student records);
- (4) gross interference with the educational process or health care services;
- (5) gross impairment (physical or cognitive) by illicit or prescription drugs;
- (6) inappropriate or unauthorized use of laboratory equipment, supplies, reagents, data, laboratory information systems, or communications systems;
- (7) unsupervised clinical practice or unauthorized presence in a clinical facility;
- (8) creating unnecessary risk of exposure to or harm from environmental, chemical-and/or bio-hazards;
- (9) unauthorized, unreported and/or excessive absence during scheduled clinic time;
- (10) non-compliance with work rules, policies and/or procedures of the laboratory and/or institution; and
- (11) non-compliance with HIPAA, CLIA or other mandated regulatory programs, as applicable to students.

POLICY FOR UNSATISFACTORY CLINICAL PERFORMANCE

The minimum passing grade for clinical courses is C- (B- for graduate). Students demonstrating unsatisfactory clinical performance will earn a grade less than C- (B- for graduate). The letter grades of I (Incomplete) or IP (In progress) will not be used to extend an otherwise unsatisfactory rotation or clinical course.

A student who demonstrates unsatisfactory performance in a clinical practicum course must repeat that clinical course. The student will earn a grade of C- (B for graduate) if he/she passes the repeated clinical course, or a grade of F if he/she does not pass. The repeat grade will be used to compute the grade point average. Students may repeat **only one** clinical course in this manner.

Scheduling of the repeat rotation or clinical course is subject to availability of an appropriate clinical affiliate site and adequate clinical supervision. It may be necessary for the student to wait until a rotation site becomes available. Unsatisfactory performance in the repeated rotation or clinical course may result in dismissal from the Department, in accordance with the Department's requirements for academic, clinical and technical standards (see Catalog).

EFFECT OF POLICIES ON PROGRAM COMPLETION

Students must recognize that penalties for unsafe, unprofessional and unsatisfactory performance; course failure; repeated courses; dismissals; make-up time; or additional assignments are likely to delay scheduled completion of program requirements, and may jeopardize scheduled eligibility for graduation, registry certification, and/or subsequent employment.

STUDENT RESPONSIBILITIES

1. SCHEDULING AND ASSIGNMENT OF CLINICAL ROTATIONS

Clinical rotations are scheduled to assure (1) a broad variety of clinical environments; (2) adequate supervision, staff interaction and representative caseload; (3) a reasonable expectation that students are able to travel to their assigned sites; and (4) that to the extent possible, student site preferences are considered during scheduling. Students may be offered the opportunity to make a preliminary selection of preferred rotation sites. In most cases, students are assigned to sites for which they have indicated a preference. However, student pre-selection of preferred rotation sites does not guarantee assignment to those sites. If the number of available clinical sites will not accommodate all students, one or more students may be assigned to an on-site, program faculty-supervised rotation in the Department's Simulation Laboratory. Scheduling for all clinical courses, including assignment to specific sites or times, is contingent on availability of an appropriate clinical affiliate site and adequate supervision.

Clinical rotations (days, times and sites) are scheduled and confirmed by the Program Faculty in consultation with Clinical Faculty. No further schedule changes can be made unless (a) the student is able to demonstrate that attendance at an assigned rotation site has or will create undue or unreasonable hardship, or (b) the Clinical Instructor must alter the schedule. **In no event is the student permitted to make his or her own arrangements for clinical rotations or to change scheduled rotation days, times or sites without a prior request to and approval by the Program Faculty and Clinical Faculty.**

Students are advised that even when a clinical hardship is demonstrated, it may not be possible to assign the student to an alternate site. When this is the case, the student may choose to postpone a rotation until a site becomes available. Postponement may result in delay of program completion.

IF YOU HAVE A DISABILITY AND REQUIRE ACCOMMODATION, you must submit a request and documentation to the Office of Student Affairs. Refer to page 52 of the School of Health Professions 2011-12 Student Handbook http://www.jefferson.edu/health_professions/documents/JSHP_Handbook.pdf

2. TRANSPORTATION, ACCOMMODATIONS AND CLINICAL EXPENSES

Students are responsible for arranging transportation to and from clinical sites. With few exceptions, Philadelphia city and area sites are accessible using public transportation (train, bus or subway). The Department does not provide students with rental cars, shuttle service, fares, tokens, or parking fees, or other cash payments for meals or accommodations at clinical sites. Students who desire or are assigned to distant clinical sites must arrange their own transportation and housing.

3. HEALTH CLEARANCE; CHILD ABUSE CLEARANCE; CRIMINAL BACKGROUND CHECK

No student will be approved to begin clinical practice until he/she has demonstrated that all appropriate clearances have been met. Health requirements include documentation, physical

examination, and immunizations required by the University (*see School Catalog*), and any specific requirements related to cytotechnology program accreditation and/or professional standards. A student presenting at a clinical rotation site without the appropriate Health and/or Background Clearance(s) will be immediately removed from the practicum site, and will not be allowed to resume his/her rotation until the Clearance(s) is/are produced.

4. PRACTICUM ROTATION DRESS CODES

A clean, white full-length lab coat is required for all students while on rotation at Thomas Jefferson University and at most other clinical sites. Professional attire should be worn at all times during clinical rotations. **Sandals, very high heeled shoes, long dresses, T-shirts, shorts and jeans are prohibited.** Jefferson student identification badges must be worn on lab coat breast pocket. Students may wear surgical scrubs when working in the Cytopreparatory Lab at Thomas Jefferson University Hospital. NOTE: Attire at clinical sites may also require lab whites and/or appropriate sterile attire to conform with CDC Universal Precautions and/or OSHA regulations for protection against transmittal of bloodborne pathogens. Students are to confirm dress codes before beginning each rotation.

5. ATTENDANCE AT ASSIGNED CLINICAL ROTATION SITE(S)

Unless specified in the clinical schedule, there is no "time off" from clinical practice. Students are required to spend a minimum of 7 hours per day of rotation, excluding breaks, lunchtime, etc (8 hours minimum with breaks/lunch). Absences are recognized only for legitimate sick time, for doctor appointments that cannot reasonably be made during non-clinic hours, or for special circumstances *only when pre-approved by the Clinical Instructor and Program Faculty*. Students must inform both the Cytotechnology Program Office (215-503-7844) and the Clinical Faculty member at the rotation site in the event of an absence no later than 9:00 a.m. for each day of absence.

- a.** Any absentee time, including time taken for job interviews, **in excess of eight hours over the entire clinical experience.** must be made up during the term in which the absence occurs and before a grade is recorded, unless Program Faculty expressly waive this requirement and the documentation of the waiver is in writing in the student's program file.
- b.** Scheduled time off **must** receive prior approval from the Program Faculty.
- c.** Whenever possible, absentee time should be made up at the site from which the student was absent and should be arranged with the Clinical Instructor at that site.
- d.** Occasionally, a Clinical Instructor will tell a student not to report to the Clinical Site on a scheduled clinic day, or will let a student leave early or come in late. **Under no circumstances are students to construe this as time off.** When this occurs, students are to report to the Department Simulation Laboratory for that clinical day/time.
- e.** Program Faculty will assume absences have not been made up unless make-up time is clearly indicated on the student's worksheets, noted with the Clinical Instructor's signature.
- f.** **Make-up time will only be approved/scheduled for half-day (4 hour) or full day (eight hour) blocks. Students will not be approved to make up time by adding minutes/hours**

to previously scheduled practicum days, or by shortening break or lunch times. **Each day or part thereof of unauthorized absence will result in a 5% reduction in the final course percentage grade for the technical/professional evaluation.** Students should be aware that this 5% reduction may affect successful completion of the practicum course.

- g. GRADUATE STUDENTS PLEASE NOTE: Time spent/required to perform and complete Graduate Research Projects is NOT included in scheduled practicum time. Research Projects conducted in the same laboratory as the assigned practicum site will necessitate assigning additional practicum days/hours as appropriate. Graduate students must keep meticulous time records for both practicum and research activities that clearly indicate that the minimum number of days and hours of practicum time have been met.**

6. PROFESSIONALISM

Students are expected to abide by the guidelines incorporated in their professional Codes of Ethics, and by standards and regulations applicable to clinical laboratory practice. Students should strive to establish good working relationships with all personnel with whom they come in contact during the Practicums. Students must demonstrate responsibility in the care of equipment and materials they use and the integrity and confidentiality of specimens they process during the assigned clinical practicum rotations. Students should seek consultation with the Clinical Faculty member at the rotation site for problems that may arise during the clinical practicum. In the event that a problem occurs that is not resolved to the satisfaction of the Clinical Faculty member or the student, consultation will take place with the student, Clinical Faculty member and the Cytotechnology Program Faculty.

7. DEPARTMENT, LABORATORY and AFFILIATE INSTITUTION POLICIES

Except as indicated in paragraph 5.d., above, students are expected to abide by the established daily work routine and attendance schedule at the Clinical Practicum rotation site or to the schedule prepared by the Program in conjunction with Clinical Faculty. If preparation or diagnosis of cytologic material necessarily extends attendance beyond scheduled hours, it is the student's professional duty to follow through to complete the necessary work. However, **at no time is unsupervised clinical practice or unauthorized presence in a health care facility permitted.** Since the purpose of clinical rotations is to maximize student exposure to and competence in cytopathology clinical practice, **the use of clinic time to work on other course or program assignments (e.g. research papers, class projects) is not permitted.** Likewise, **use of practicum site laboratory computers (for email/internet searches/texting), laboratory phones, or photocopy machines for personal reasons is not permitted.** DBST policy regarding use of cell phones and pagers remains in effect, i.e. **they must be silenced and are not to be used while on duty.**

Student clinical performance (diagnostic and technical/professional components), is evaluated on a par with a laboratory position description for an entry level staff Cytotechnologist. Therefore, it is in the students' best interest to familiarize themselves with laboratory policies regarding

employee conduct, disciplinary procedures and laboratory technical standards. Students should review these policies on arrival at the rotation site.

8. DAILY WORKSHEETS: MAINTENANCE AND DOCUMENTATION

Maintenance of work records and accurate documentation of work product are essential to clinical practice in cytopathology laboratories. Federal regulations require cytotechnologists to record workload volume, diagnoses and number of hours spent screening slides for each day of work. As a means of familiarizing students with these requirements, as well as providing a basis for clinical evaluation, the Program also requires this documentation.

The Cytotechnology Program provides blank daily worksheets to students and to Clinical Instructors. Each student is responsible for maintaining a case log, in which all specimens prepared, diagnoses rendered and all daily activities, for each day of rotation, must be entered. To satisfactorily document casework, the Daily Worksheet must include and clearly indicate the date, accession number, specimen type, number of slides for each specimen, student and cytotechnologist and/or cytopathologist diagnosis, and the totaled number of gyn and non-gyn cases and slides for each day. Students should ensure that their daily worksheets are reviewed and initialed by the Clinical Instructor on a regular basis during the rotation and at the completion of each rotation. **It is the student's responsibility to submit to the Program Director his/her daily worksheets for review and evaluation no less than seven (7) calendar days after completion of each clinical course and/or as required for Program review.**

Failure to accurately document clinical work or to submit worksheets in a timely manner may result in significant point deductions, delay of grade reports or failure of the Clinical Practicum course. Specific instructions to students for completing worksheets are outlined on page 21.

9. CLINICAL AFFILIATE SITE ASSESSMENT

Students evaluate rotation sites as part of our reciprocal evaluation procedure. Students must return these forms to the Program office no more than seven (7) calendar days after completion of each rotation. Anonymous, composite evaluations are returned to each site at the completion of rotations for each academic year. A copy is maintained in the Program's Clinical Site files.

10. EMPLOYMENT INTERVIEWS

Students should make every effort to schedule appointments for job interviews on days when clinicals and classes are not scheduled. However, students **in good standing** may be approved for a maximum of one clinic day (8 hours) for a job interview(s) **only** if the following conditions are met. Note that the eight hour maximum spans the entire clinical phase of the program. ***This policy should not be construed to mean one day off within each clinical course.***

- a. A request for interview time off must be submitted to the Program Faculty at least one week in advance of the tentative date of the interview.
- b. Program Faculty must pre-approve requested time off for interviews.
- c. Sick leave and/or required clinical time can not be used or substituted for interview time.

- d. **Time off granted for interviews in excess of eight (8) hours must be made up.** Time approved for interviews during regularly scheduled classes or clinical rotations does not excuse students from meeting requirements for that class or clinical rotation, including required time in clinical practice.
- e. Program Faculty determine where and when missed time for job interviews will be made up.

11. CAREER DEVELOPMENT CENTER

The School's Career Development Center offers a variety of career-related services, free of charge, to students of the School of Health Professions. The Center helps students set short and long range career goals, prepare a resume, write letters (such as cover and thank you letters), make contacts and schedule employment interviews, prepare for interviews, evaluate job offers, select a graduate program, and investigate financing for graduate education.

- The Career Development Center keeps a list of job opportunities available to Jefferson students and graduates, including part-time work for students and full time professional positions for graduates of each program.
- The Center also provides the computerized career planning program Discover, which guides you step by step through the career evaluation and planning process.
- The Career Development Center has evening hours by appointment.
- If you wish to schedule an appointment in the Career Development Center, to talk with the Coordinator, or to use the computer, call 503-5805. You may also stop by the Career Development Center, located on the 7th floor of the Edison Building, and schedule an appointment, or browse through the materials and job listings.

12. WEATHER EMERGENCY POLICY

Should weather conditions necessitate, the Dean (or in his/her absence, his/her designee) may declare a School of Health Professions Weather Emergency. The parameters of the Weather Emergency policy are as follows:

- Once a weather emergency is declared, all on-campus and off-campus classes (clinical and non-clinical) are cancelled.
- Students scheduled to be at off-campus clinical locations must contact their immediate clinical supervisor at the rotation site to inform him/her of the Jefferson Weather Emergency.
- JCHP Weather Emergencies are announced on local radio stations* as a school closing by the number **173** for daytime classes and **2173** for afternoon and evening classes (including the Department of General Studies). **Thomas Jefferson University's Weather Emergency number is 1-800-858-8806. Call 215-503-7844 for Department-specific information.**
- Local radio stations using the Philadelphia School Closing Service are
 - KYW (1060-AM)
 - WCAU (1210-AM)
 - WDAS (1480-AM)
 - WDAS (105.3-FM)
 - WPEN (950-AM).
- School closing information can be accessed online at **kyw1060.com**
- The KYW Newsradio School Closing Line is **1-900-737-1060**. Each call is \$.95.

13. STUDENT PROFESSIONAL LIABILITY COVERAGE

The School of Health Professions maintains insurance coverage for professional and general liability for all matriculated students while they are on authorized clinical affiliate assignments. Only students officially registered for clinical courses are covered by this policy. Only when participating in activities specifically designed for the practicum or other approved courses are students covered by this policy.

CLINICAL AFFILIATE SITE & CLINICAL/PROGRAM FACULTY RESPONSIBILITIES

Cytotechnologist Clinical Faculty at clinical affiliate sites share responsibility with Program Faculty and the students themselves for the professional education of Cytotechnology students enrolled in the Department of Bioscience Technologies. Clinical Faculty occupy a key role in making the students' clinical experience a successful and meaningful one.

Clinical sites maintain active affiliate status by providing at least one student rotation experience in each academic term (i.e.: during each of the Fall, Spring, Pre-Summer, Summer semesters). The list of active clinical affiliate sites is updated annually. All cytologists employed at active clinical sites are eligible to attend Department of Bioscience Technologies-sponsored continuing education workshops, conferences, seminars and other activities for substantially reduced or no fees. Cytologists employed at inactive clinical affiliate sites may attend Department-sponsored activities at the regular fee.

Clinical Faculty work closely with the Program Faculty and are responsible for:

1. serving as a model of the professional cytotechnologist for students to emulate.
2. orienting students to the hospital and/or laboratory facilities, and to the personnel, policies, and procedures involved in the day to day functioning of their cytopathology laboratory.
3. insuring that students read the policy and procedure manual and abide by the employee conduct guidelines and laboratory standards therein.
4. supervision, technical and diagnostic instruction, and evaluation of students during student rotations at the Clinical Practicum site with respect to work assigned to and completed by the student.
5. reviewing, verifying and initialing student *Daily Worksheets* on a regular basis during the rotation and at the completion of the rotation prior to making a final assessment of the student's performance.
6. clearly and accurately indicating on student worksheets and on the *Diagnostic Microscopy Evaluation* the basis for awarding or deducting points for student-diagnosed cases. **Note: Clinical and Program Faculty are required to comply with the evaluation methods and assessment standards as outline in this Handbook.**
7. providing a signed evaluation of the student's diagnostic performance based on the guidelines provided by the Program or based on an evaluation system established by the clinical site in conjunction with Program Faculty.
8. assuring that the *Technical and Professional Evaluation* of each student reflects a factual and objective assessment of the student's cognitive, motor and affective abilities and behaviors. [Students are evaluated on a par with an entry level Staff Cytotechnologist position]
9. conferring with Program Faculty throughout the academic year at regular intervals regarding students' performance, and review of students' individual worksheets.
10. attending Clinical Affiliate meetings to assure currency with evaluation and accreditation requirements
11. submitting updated annual laboratory caseload and personnel data to the Program for accreditation reports.

GENERAL INFORMATION ABOUT 2011-13 ACTIVE CLINICAL AFFILIATE SITES

Please note: For sites listed with an asterisk (*), complete information was not available at the time of printing. Listings are based on information received as of September, 2011.

The symbol **J** indicates laboratories at *Jefferson Health System* member or allied institutions.

1. **Abington Memorial Hospital - Abington, PA** <http://www.amh.org/>

Clinical Instructors: Amanda Capuzzi Mahoney **email: [__ AMahoney@amh.org __](mailto:AMahoney@amh.org)**

Laboratory Director: Martha J. Sack, MD

Cytopathologist: Martha J. Sack, MD

Location: Cytopathology Laboratory, Widener Bldg.; Ground Floor
Department of Pathology
Abington Memorial Hospital
1200 Old York Road
Abington, PA 19001

Phone: 215-481-2361 (Ms. Mahoney) **Fax: 215- 481-4481**

Directions: *By car:* From Center City take Route I-95 north to Route 73 (Cottman Avenue). Follow Route 73 (which becomes Township Line Road) and turn right when you reach Old York Road (Route 611 North). Abington Memorial Hospital is a few minutes further, at the intersection of Route 611 and Horace Avenue. Turn left on Horace Avenue.

Public transportation: via commuter train line R2 Noble Stations, or SEPTA Bus #55

Hours: 7:30 AM - 5:00 PM

Dress: Professional attire

Special Notations or Procedures:

Student will be expected to spend time in the cytopreparatory area as well as assist in collection of fine needle aspirations. Proper smear technique and quick staining will be utilized to give on-site assessment of the FNA sample. A variety of non-gynecologic samples and ThinPrep Pap specimens are available for review. When workload permits, weekly cytotech-cytopathologist conferences will be held.

J 2. ***Albert Einstein Medical Center - Philadelphia, PA**

Clinical Instructor: Carol Porter, CT(ASCP); Ngan Tran, CT(ASCP) **email: porterc@einstein.edu**

Laboratory Director: Denise Najjar, MD

Cytopathologists: Denise Najjar, MD; Maysoun Ghabra, MD

Location: Department of Pathology and Laboratory Medicine
Tower Building, Ground Floor
5501 Old York Road <http://www.einstein.edu/departments/pathology-laboratory-medicine.html>
Philadelphia, PA 19141 **Phone: 215-456-6118 Fax: 215-456-2388**

Directions: *By bus or subway:* take Broad Street subway North to Broad & Olney stop. Hospital is across Tabor Road. *By car:* Drive North on Broad Street to Medical Center.

Hours: 8:30 AM - 4:30 PM

Dress: Professional attire (no jeans, no open-toe shoes; white lab coat required)

Special Notations or Procedures:

3. American Oncologic Hospital - Fox Chase Cancer Center - Philadelphia, PA

Clinical Instructor: Joseph Clarici, BA, CT(ASCP) **email:** j_clarici@fcc.edu
Laboratory Director: Hormoz Ehya, MD <http://www.fccc.edu/physicians/pathology/index.html>
Cytopathologist: Karen S. Gustafson, MD, PhD
Location: 7701 Burholme Avenue Room C-427
Philadelphia, PA 19111 **Phone: 215-728-3862 Fax: 215-728-2899**
Directions: *By bus:* take Market St. El to Bridge and Pratt Terminal; then take "N" bus to hospital
By car: take 95N to Cottman Road exit. Take Cottman Road West to Center entrance.
Hours: 9:00 AM - 5:00 PM; 45 minute lunch, two 15 minute breaks
Dress: Mandatory: Full length white lab coat; no open-toed shoes. Suggested Dress Code: Casual - no T-shirts, no blue jeans (it is suggested that men wear a tie)
Special Notations or Procedures:

Students will be expected to screen gyn and non-gyn cytology cases, prepare cytologic specimens, handle and assist fine needle aspiration specimens and assist in the organization of daily workload. Opportunities to observe work in flow cytometry, immunoperoxidase staining, histology and gross pathology may be available if time permits. Students should inform the Clinical Instructor of interest they have in these areas of pathology.

4. AtlantiCare Regional Medical Center - Atlantic City, NJ

Clinical Instructor: Diane Schellhas, CT(ASCP), Lisa Lai, CT(ASCP) **email:** Diane.Schellhas@atlanticare.org
Lisa.Lai@atlanticare.org
Laboratory Director: S. Adil Can, MD
Cytopathologist: S. Adil Can, MD
Location: 1925 Pacific Avenue
2nd Floor
Atlantic City, New Jersey 08401 **Phone: 609-441-8168; -8064**
Fax: 609-441-2195
Website: www.atlanticare.org

Directions:
By Car: North on S. 9th Street towards Sansom St. Turn right onto Market St. Turn Left onto N. 5th St. Take the I-676 ramp. Merge onto Benjamin Franklin Bridge. Stay straight to go on to I-676 S. Turn slight right onto I-76E. Stay straight to go onto RT. 42 S. Stay straight to go onto Atlantic City EXPY toll. Atlantic EXPY becomes Atlantic City EXWY. Atlantic EXWY becomes Christopher Columbus Blvd. Turn left onto Atlantic Ave. Turn right to S. Ohio Ave. Turn right onto Pacific Ave. Parking in Caesar's Casino Parking Garage 6th/7th floors with ID badge.
Estimated travel time 1 hour 27 minutes.
See Department for bus or train schedules/loctions.
Hours: 9:00 AM - 5:00 PM (Students should report at 8:30 AM)
Dress: Neat casual clothing with clean white lab coat (please no jeans)
Special Notations or Procedures:
Students must be aware of special hygiene policies

5. Cooper Hospital/University Medical Center, Camden, NJ

Clinical Instructors: Jennifer McErlane, BS, CT(ASCP) **email:** mcerlane-jennifer@cooperhealth.edu
Evelyn Lorence, BS, CT(ASCP) **email:** lorence-evelyn@cooperhealth.edu
Eileen Rizzo, BS, CT(ASCP) **email:** rizzo-eileen@cooperhealth.edu

Laboratory Director: William J. Klump, MD
Cytopathologist: William J. Klump, MD
Location: in new hospital (Pavilion) building; Follow signs to park. Enter the hospital Pavilion building and ask security guard to call the lab; lab personnel will meet you in lobby
1 Cooper Plaza Pathology Department P-047
Camden, NJ 08103 **Phone: 856-342-2493 Fax: 856-968-8207**
<http://www.cooperhealth.org/departments-programs/pathology>

Directions: By transit: Take Speed Line from 10th & Locust (East) to Broadway Station; Mickle Blvd. to Cooper Hospital
Hours: 8 working hours per day; Flexible scheduling per laboratory policy
Dress: Casual; white lab coat required
Special Notations or Procedures:

1. Prescreening of gynecologic and nongynecologic specimens
2. Scope to scope discussion of difficult cases, including sign-out with pathologist

3. Cytoprep 1-2 days per week
4. Assisting on fine needle aspirations

NB: Prior to start of student rotation, Student must have available and submit (1) Criminal Background Check form; (2) Proof of citizenship or valid student visa; (3) Negative drug screen test/Health Clearance form from University Health Service



6. Doctors Pathology Services , Dover, DE <http://www.dpspa.com/>

Clinical Instructor: James Brady, MS, CT(ASCP); Kathy O'Keefe, CT(ASCP) email: jbrady@dpspa.com
 Jenna Murfree Phone: 302-677-0000 x 114 email: jmurfree@dpspa.com
Laboratory Director: Ray Sukumar, MD
Cytopathologist: Zohreh Zaki, MD
Location: 882 Walker Road
 Dover, DE 19904
Phone: 302-677-0000 Fax: 302-677-0010

Directions: Ask Program Director for DRIVING directions. No public transportation

Hours: 8 working hours per day; Flexible scheduling per laboratory policy

Dress: Casual; white lab coat required

Special Notations or Procedures:

This is a private laboratory serving the state of Delaware. DPS provided only liquid-based Pap tests. Slides are stained using Gemini automated stainer/coverslipper. DPS also provided CT/GC/HPV molecular diagnostic testing using DIGENE hybrid capture technique. Students are encouraged and will be expected to participate in all facets of laboratory testing at this site (including histology, histocorrelation and photomicroscopy). Some non-gyn cytology is processed and diagnosed (mainly FNA)

7. Hospital of the University of Pennsylvania - Philadelphia, PA

Clinical Instructors: Alice Wright, BS, CT(ASCP) email: alice.wright@uphs.upenn.edu
 Cynthia M. Skotnicki, BS, CT(ASCP); Stanton Slott, BS, CT(ASCP)
Laboratory Director: Prabodh Gupta, MD
Cytopathologist: Prabodh Gupta, MD
Location: Founders Pavilion, 6th floor
 3400 Spruce Street
 Philadelphia, PA 19104-4283 **Phone: 215-662-3209 (Lab)**
215-662-3212 (Ms. Wright)
Fax: 215-349-8994

AutoCyte Lab: Maloney Building, basement

Phone: 215-615-3404 (Ms. Skotnicki)

Fax: 215-349-8469

Directions: SEPTA Route 42 bus can be taken from 11th and Walnut Streets to 34th and Spruce Streets. The hospital is on the southwest corner of 34th and Spruce.

Hours: 8:30AM - 5:00PM (Cytoprep begins at 7:30AM and ends at 4:00PM)

Dress: Professional; clean white lab coat required at all times

Special Notations or Procedures: Automatic stainer and coverslipper; all contemporary laboratory equipment; multi-head television microscope; FNA on-site cart. Bi-weekly interesting case conferences at multi-head with director and/or staff pathologist. Daily feedback and review of slides with clinical instructor; ASC teleconference; workshop and study packet materials available.

J 10. Mercy Fitzgerald Hospital Darby, PA

Clinical Instructors: Charlene Falcone, BS, CT(ASCP) **email: cfalcone@mercyhealth.org**
Kelly Doxzon, MBA, CT(ASCP) **email: kdoxzon@mercyhealth.org**

Laboratory Director: Lorenzo Galindo, MD

Cytopathologist: Lorenzo Galindo, MD, Nabil Al-Annouf, M.D

Location: Mercy Health Laboratory
Medical Science Building, Room 1-B
Lansdowne and Baily Roads (1500 Lansdowne Avenue)
Darby, PA 19023 **Phone: 610-237-4476 Fax 610-237-5689**

Directions: -*By car:* take City/Township Line Ave (Baltimore Pike/Route 1) West/South out of Philadelphia to Lansdowne Avenue; turn left and follow Lansdowne Ave. to Medical Center at third traffic light (note that you will pass Delaware Country Memorial Hospital before you come to Mercy Catholic). OR take 676 W to 76W (follow sign to Valley Forge) to 476 South (Blue Route) to Route 1/City Line Ave North to right turn onto Lansdowne Avenue. Parking is on left side of street behind St. Bernard's Hall.
-*By train:* From Market East Station take R-3 line to Lansdowne Station. Cross train tracks and follow Lansdowne Ave. South to Medical Center (approx 3/4 mile). Hospital is on the right.
-*By EL:* Take Market Street EL (at Gallery) to 69th Street Terminal. Transfer to the Route 113 bus, which stops at the medical center.

Hours: 8:00A - 4:30P

Dress: Scrubs preferred; neat casual clothing acceptable (no denim or spandex. Clean white lab coat required.

Special Notations or Procedures: The student will participate in all areas of the laboratory (accessioning, cytoprep, FNA attendance, gyn and non-gyn screening). The student will also have the opportunity to observe/assist in the Gross Room and Histology Laboratory. CAP Pap Program, study sets and case sign-out/discussion with pathologists are available.

11. MLHS/MLCL - Lankenau Medical Center - Wynnewood, PA

Clinical Instructors: Mary Cahalan, CT(ASCP) Email: cahalanm@mlhs.org
Laboratory Director: Vlasta Zemba-Palko, MD
Cytopathologist: Vlasta Zemba-Palko, MD
Location: 100 Lancaster Ave.
3rd Floor Center Bldg.
Wynnewood, PA 19096 Phone: 484-476-2623 (Lab)
484-476-8418 (Ms.Cahalan)
484-476-8470 (FAX)

Directions: Call laboratory for directions

Hours: 8:30AM – 5:00PM (Cytoprep begins @ 7:30AM)
One hour lunch break

Dress: Neat casual clothing; no jeans. No open toed shoes. White lab coat required.

Special Notations or Procedures: A routine day includes primary screening with the exception of a cytopreparatory rotation. Activities include:

- 1) Screening of gynecologic & nongynecologic specimens
- 2) Attend and assist at fine needle aspiration procedures
- 3) Rotation in HPV/DNA processing area
- 4) Rotation in cytopreparatory area; including GMS, Immunofluoresence, and leukemia panel stains.
- 5) Review cases with cytotechnology and pathology staff
- 6) Review study materials
- 7) Attend Cytopathology lectures & case reviews

12. Pennsylvania Hospital - Ayer Laboratories - Philadelphia, PA

Clinical Instructor: Eugene Smith, BS, CT(ASCP) **email: smithe@pahosp.com**
Laboratory Director: John S. J. Brooks, MD
Cytopathologist: Lisa Dwyer-Joyce, MD
Location: 6th floor, Preston Building
8th and Spruce Streets
Philadelphia, PA 19107 **Phone: 215-829-6969 Fax: 215-829-7564**

Directions:

Hours: 8:00AM - 4:30PM (1 hour lunch)

Dress: White Lab Coat

Special Notations or Procedures: Students will attend all fine needle aspirations, be responsible for screening them, and arriving at a working diagnosis which may include differentials. In addition, other non-gynecologic and gynecologic specimens will be screened for review by another technologist or the clinical instructors. Texts and reference materials, as well as review with the clinical instructors, will be available at all times.

A microscope is available at the site for student use while on rotation.

13. Quest Diagnostics, Inc. - Horsham, PA

Clinical Instructors: Michael Martinak, BS, CT(ASCP) **email: michael.w.martinak@questdiagnostics.com**
Jane Linton, BS, CT(ASCP) **Phone: 215-442-7618**
Laboratory Director: Maryam Bakhtar, MD
Cytopathologist: Maryam Bakhtar, MD
Location: 900 Business Center Drive, 800 Building, 2nd Floor
Horsham, PA 19044 **Phone (Mr. Martinak): 215-444-8217**
Fax: 215-957-0563

Directions: *By car:* Take 676 West to 76 West to 476 North (Blue Route, toward Plymouth Meeting) to PA turnpike (276) East toward New Jersey (toll). Exit at Willow Grove, Route 611. Follow Route 611 South (keep left after toll plaza). Stay on off-ramp lane and make a right turn at light on to Maryland Drive (Carrabba's on left). Stay right/bear right on to Commerce Drive and pass Dresher Street intersection. Turn right on to Church Road which becomes Business Center Drive. Pass Quest 900 Building on right, then turn in to next building lot (flags in front) - Quest 800 Building.
OR take Broad Street North to Old York Road (Route 611 North) to Welsh Road (Route 63 West); then right turn on Dresher Road; then left turn into Horsham Business Center.
OR take 195 North to Welsh Road (Route 63 West); then right turn on Dresher Road; then left turn into Horsham Business Center.
By public transportation: From Market East station, take R2 Regional Rail Line to Willow Grove Mall. At mall, take #310 Breeze Line, which will take you directly to the Horsham Business Center.

Hours: 8:00 AM - 4:30 PM; hours may be shorter if staff shifts completed for the day.
Shorter hours may require additional and/or make-up time.

Dress: Neat casual clothing and clean white lab coat

Special Notations or Procedures:

Students will be required to handle all phases of the cytology laboratory to include preparation and staining of all specimens, coverslipping, screening and all pertinent paperwork. They will have the opportunity to discuss cases with all staff cytotechnologists and the pathologist. Students will become familiar with utilization of CRT for cytology results and patient information.

14. Quest Diagnostics, Inc. - Mt. Laurel, NJ

Clinical Instructors: Scott Slimm, BS, CT(ASCP) **email: scott.i.slimm@questdiagnostics.com**
Phone: 856-222-0675 ext. 22 Fax: 856-222-0946
Laboratory Director: Carolyn E. Grotkowski, MD
Cytopathologist: Carolyn E. Grotkowski, MD
Location: 907 Pleasant Valley Avenue
Larkhall at East Gate - Suite 3

Mt. Laurel, NJ 08054

Directions: *By car:* Take Ben Franklin Bridge toward I676 South. Take US 30 East toward US 130/New Jersey Turnpike/Cherry Hill/Trenton. Merge on to US 30 East. Turn slight left on to Kaighn Avenue. Kaighn Ave becomes NJ 38 East. Turn right on to Pleasant Valley Avenue. Total distance: 12.23 miles Estimated driving time: 26 minutes

By public transportation: Patco

Hours: 8:00 AM - 4:30 PM; hours may be shorter if staff shifts completed for the day. Shorter hours may require additional and/or make-up time.

Dress: Neat casual clothing and clean white lab coat

Special Notations or Procedures:

Students will be required to handle all phases of the cytology laboratory to include preparation and staining of all specimens, coverslipping, screening and all pertinent paperwork. They will have the opportunity to discuss cases with all staff cytotechnologists and the pathologist. Students will become familiar with utilization of CRT for cytology results and patient information.

15. Quest Diagnostics, Inc. - Teterboro, NJ

Clinical Instructors: Marlene Daniels, BS, CT(ASCP)

email: Marlene.X.Daniels@questdiagnostics.com

Cheryl Cereso, BS, CT(ASCP), Cytology General Supervisor

Laboratory Director: William E. Tarr, MD

Director, Anatomic Pathology Clinical Trials: Ronald Luff, MD, MPH

Cytopathologist: Leza Gallo, MD

Location: One Malcolm Avenue
Teterboro, NJ 07608-1070

Phones: 1-800-222-0027; 201-393-5000

x5495 (Ms. Daniels); x6160 (Dr. Gallo) Fax: 201-462-4706

Website: www.questdiagnostics.com

Directions: *By car* from Center City Philadelphia: Take I95 North to the New Jersey Turnpike exit.

Take NJ Turnpike North to exit 16W off the Turnpike to Route 3 West (Meadowlands Sports Complex). Continue on Route 3 approximately 3-4 minutes. The first exit off Route 3W is for Route 17 North. Take exit 17 North, you will be on 17N for about 10 minutes. After three stoplights, the fourth light is Franklin Avenue. You will see a sign for Teterboro Airport. Turn right onto Franklin Avenue. Continue over railroad tracks and drive to end of street, where the airport will be directly in front of you. Stay in the left-hand lane, make a left turn at the traffic light, then make another left turn into the Quest Diagnostics driveway. Drive through entrance gate, park in visitor's lot to the left. Enter building with the flagpoles at the front of the building and sign in at security desk.

Hours: 9:00 AM - 5:00PM

Dress: Neat comfortable clothing and clean white lab coat

Special Notations or Procedures:

Students will screen undiagnosed work on which an intensive rescreen will be conducted by section managers. Case Study Sets have been compiled. One-on-one intensive double-headed microscopic review of cases will be conducted. Continuing weekly educational activities include weekly team meetings, ThinPrep meetings, ASCP teleconferences. 15-head microscope for conferences, Cytoc processors and VT terminals to access Questlab information system and enter case results under supervision.

16. Tenet - Hahnemann University Hospital - Philadelphia, PA

Clinical Instructor: Catherine DeWitt, BS, SCT(ASCP), CT(IAC)

Phone: 215-762-3542 email: catherine.dewitt@tenethealth.com

Laboratory Director: Lorenzo Galindo, MD

Cytopathologist: Lorenzo Galindo, MD

Location: Rooms 5306-5316
New College Building, Mail Stop 435
Broad (15th) and Vine Sts.

Philadelphia, PA 19102-1192 **Phone: 215-762-8481 (Lab)**

Fax: 215-762-6286

Directions: walking distance from Jefferson campus

Hours: 9:00AM to 5:00PM; one hour lunch

Dress: A professional dress code is required. Street clothes are permitted with a white lab

coat/jacket

Special Notations or Procedures:

1. Students will participate in all cytopreparatory procedures including specimen preparation, coverslipping, filing, and computer functions
2. Students will attend FNA in diagnostic radiology, radiation therapy, ENT, Ob/Gyn, along with another cytology staff members, and will aid in performing "on-site" stat staining and adequacy readings
3. Students will have the opportunity to screen gyn and non-gyn cases, complete with any surgical correlations
4. Students will be exposed to a variety of special stains including AFB, FITES, Giemsa, PAS and PAP, for complete diagnostic evaluations
5. Students will be able to attend cytopathology lectures and case reviews
6. Students will be exposed to ERA techniques performed on FNA materials.
7. Students will be introduced to the CAS 100-cell analyzer system.

17. Temple University Hospital - Philadelphia, PA

Clinical Instructor: Michael Carrozza, BS, CT(ASCP) **email: carrozmj@tuhs.temple.edu**
Deborah S. Eden, BS, CT(ASCP)

Laboratory Director: Charalambos Solomides, MD

Cytopathologist: Charalambos Solomides, MD **Varsha Manucha, MD, FCAP, Xinmin Zhang, MD**

Location: 2nd Floor, Out-Patient Building, Room 218 OPD
3401 North Broad Street,
Philadelphia, PA 19140

Phone: 215-707-3029; -3450

Fax: 215-707-5736

Directions: *By subway:* Take Subway to Erie Station and walk South approximately 2 blocks.

Room 218 is on the 2nd floor of the Out-Patient Building; entrance is on Tioga,

East of Broad Street, opposite the parking garage.

Hours: 8:30 AM - 4:30 PM; one hour for lunch

Call **215-707-3029** between 8:30-8:30A if not coming in on scheduled day

Dress: Departmental dress code. Lab coat is required.

Special Notations or Procedures: This laboratory, as part of a large, urban teaching center, receives a wide variety of unusual cytology specimens. The student is encouraged to utilize this opportunity through daily screening, reviewing teaching sets, participating in selected aspects of clinicopathologic correlation, and accompanying cytotechnologists to aspirations performed in Radiology.

J 18. Thomas Jefferson University Hospital - Philadelphia, PA

Clinical Instructors: Clementine Hawthorne, BS, CT(ASCP) **email:**
clementine.hawthorne@jeffersonhospital.org

Laboratory Director: Charalambos C. Solomides, MD

Cytopathologists: Marluce Bibbo, MD, ScD, Moira Wood, MD

Location: 2nd Floor, Room 255 JA Thompson Bldg
11th and Walnut.

Phone: 215-955-6437 or 6349 (Lab) Fax: 215-955-2426
-1198 (Ms. Hawthorne)

Hours: 8:00 a.m. - 4:00 p.m., one hour lunch break and two 15 minute breaks

Dress: Departmental dress code

Special Notations or Procedures: A routine day includes primary screening with the exception of a cytopreparatory rotation. Activities include:

- 1) Screening of gynecologic and nongynecologic specimens
- 2) Attend and assist at fine needle aspiration procedures
- 3) Attend laboratory cytology conferences
- 4) Rotation in cytopreparatory area
- 5) Review cases with cytotechnology and pathology staff
- 6) Review study materials

▶ **STUDENT: Instructions for Completion of DAILY WORKSHEETS**

1. COMPLETE AT LEAST ONE WORKSHEET FOR EVERY SCHEDULED CLINICAL DAY.

Program Faculty *strongly* recommend that students complete their worksheets on a *daily* basis. Do NOT wait until the end of your rotation to go back and fill in your worksheets. Faded or incorrect memories produce erroneous documentation.

- Students must fill out **at least one** daily worksheet/case log for **each** practicum **day**, whether or not they were actually in attendance at the clinical site.
- Student diagnoses must be entered in **ink** (not pencil).
- Students must formulate and write their diagnoses, and/or document time spent in other activities, on worksheets prior to review/rescreen by the Clinical Instructor.

2. HOW TO DOCUMENT CASE INFORMATION ON THE WORKSHEET:

All of the following information MUST be entered legibly, as this example indicates:

Date Read		Accession #; Specimen Type	# of Slides	Student Diagnosis: Use Terminology, NOT Computer Codes	Reviewing Cytotechnologist Diagnosis: <small>if same</small> Enter if different from Student	Comments: Case Reviewed with Student?	Points (+, -)
2/14/11	03-12345 CX	2	Sat. Lim-No EC HSIL (mod) HPV TV, Candida, Herpes	✓			
2/14/11	N03-12345 FNA-liver	7	Neg: Normal hepatocytes and lymphs present		Hepatocellular ca	yes - missed cancer cells	-10

- A Enter the date on which you read each case
- B Write the accession number as it appears on each case/slide; and
- C indicate the type of specimen with a generally recognized abbreviation (eg: CX = Pap smear, TP = ThinPrep, BW = bronchial washing; FNA organ = fine needle aspirate of [eg] breast)
- D Enter the number of slides for each case
- E Legibly write or print your diagnosis using descriptive terminology/nomenclature. Generally recognized abbreviations may be used (eg: HSIL for high grade intraepithelial lesion), but **do NOT use alpha/ numerical or computer coding** {eg: computer code number 324 or B9c. may mean "benign cellular change" at your clinical site, but it is not generally recognized terminology).
- Bethesda terminology is required for gynecologic diagnoses.**
- Specific diagnoses are required for non-gynecologic cases.** Entries such as "positive", "suspicious"/"suspicious for malignancy", or "atypical" without further qualification or clarification are unacceptable. If the laboratory uses these terms, your diagnosis must read, eg, "suspicious for gastric adenocarcinoma, specify type".)

3. HOW TO MAKE A CORRECTION ON THE WORKSHEET:

2/13/99	03-12345 CX	2	Sat. Lim-No EC HSIL (mod) HPV TV, Candida, Herpes <i>sg</i>			
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- Corrections must only be made prior to review/rescreen by the Clinical Instructor. For worksheet corrections, draw one line - **ONE LINE ONLY** - through original entry and rewrite as necessary. Write your initials next to the corrected entry. (e.g. ~~LSH~~ ASC-US /initials)

DO NOT USE WHITE-OUT OR OTHERWISE OBLITERATE A DIAGNOSIS.

4. TALLYING CASES AND SLIDES ON EACH WORKSHEET:

- The total number of cases and slides for each worksheet must be entered; do not aggregate totals for multiple worksheets for the same day

5. TIME SPENT SCREENING & ON NON-MICROSCOPIC ACTIVITIES MUST BE DOCUMENTED:

STUDENT MUST Enter Case, Slide + Time Totals For This Page ONLY				Student: Indicate time spent on non-microscopic activities:		Total Pt
ENTER TOTALS FOR THIS PAGE ONLY	# Cases	# Slides	Indicate # hours spent screening			CT Mill.
GYN =>			write as __ hrs __ min			
NON-GYN =>						

1 hr 30 min
2hr 10 min
45 min

Student: Indicate time spent on non-microscopic activities:

8-9 a Liver FNA in short procedure room
10-11 reviewed cases with pathologist

4pm Left early for doctor appointment (approved by _____)

6. REVIEWING YOUR WORK AND COMPILING YOUR CASE LOG:

- When you have completed your cases/trays, turn over your slides, cytology requisition/report forms and worksheet(s) to your Clinical Instructor for review/rescreen, comments and grading.
- On completion of the Clinical Instructor rescreen, the Clinical Instructor should return worksheets to you. If there is a disagreement on a diagnosis, ask the Clinical Instructor to review the case with you.
This review is NOT to be considered an opportunity to revise the diagnosis you originally entered on your worksheet.
- Recheck your tallies for the number of cases and number of slides included on each worksheet, as well as verifying specimen type for each case reviewed. Be sure to enter your case and slide totals in the areas indicated at the bottom of each worksheet. These totals may be verified and then transferred to the Diagnostic Evaluation Worksheet by the Clinical Instructor.
- All time spent **at or away** from the clinical site must be accounted for and verified by the Clinical Instructor. Even if you were out sick or at a job interview, fill in a worksheet for that day indicating why you were absent.
- Retain the daily worksheets in **chronological order**; these constitute your individual case log. Make sure there is at least one corresponding worksheet for each day of your rotation. **YOU MUST TURN IN ALL OF YOUR ORIGINAL WORKSHEETS TO PROGRAM FACULTY WITHIN SEVEN DAYS OF THE COMPLETION OF EARLY SEMESTER ROTATIONS, AND ON THE LAST DAY OF ROTATION FOR LATE SEMESTER ROTATIONS.**
- Do **NOT** staple or paperclip worksheets.

Each incorrect or missing entry on a worksheet will incur a 5-point deduction under the Protocol section of your Diagnostic Microscopy evaluation.

Each missing worksheet will incur a 50-point deduction from the total case points for the Diagnostic Microscopy evaluation.

▶ **CLINICAL INSTRUCTOR:**
• **DAILY WORKSHEETS**
• **DIAGNOSTIC MICROSCOPY EVALUATION**

• **DAILY WORKSHEETS**

1. Review student diagnoses for each case and clearly indicate any necessary comments on the worksheet.
2. If there is a disagreement on a diagnosis, review the case with the student, indicating on the daily worksheet the review and the nature of the discrepancy. If you are entering your diagnoses using your laboratory's computer codes or other shorthand designation, please **attach a listing of your laboratory's code definitions to the Diagnostic Microscopy Evaluation form.**
3. For cases in agreement with the student, you need only make a check-mark in the [✓ same] column of the worksheet. For each discrepant case, enter the reviewer diagnosis. **It is not necessary to enter point deductions as indicated in the Point Value Grids as the Point Values are verified by Program Faculty.** Do indicate point awards as indicated in the guidelines.
4. The student and reviewing Cytotechnologist should be present when a Pathologist signs out non-negative cases. *The Program considers Pathologist/Cytotechnologist/Student collaboration in diagnostic cytopathology a valuable and important aspect of cytology education and practice.*
5. Initial each worksheet to verify the student's and your review of the cases and/or activities listed.
6. Verify the totals indicated by the student on the daily worksheet(s). If you are submitting the Diagnostic Microscopy Evaluation Worksheet(s), transfer these numbers to those Worksheets.
7. You may return completed report forms and slides to students for appropriate filing and recording. **Worksheets are returned to students for submission to the Program Office.**
8. Under your close supervision, students may enter final diagnoses in a log book or computerized laboratory information system for all cases not reviewed by a pathologist.

• **IF YOU ARE USING THE DIAGNOSTIC MICROSCOPY EVALUATION FORM:**

1. Enter the date screened and transfer the case totals indicated by the student at the bottom of each of the daily worksheet(s) to the Diagnostic Microscopy Evaluation Worksheet. Enter totals from each worksheet. Please do not aggregate totals from multiple worksheets for the same day. You may use more than one Diagnostic Microscopy Evaluation form to list all worksheet totals.
2. Indicate point deductions for each worksheet under the appropriate column (ie: specimen adequacy, under/overcalls, locator skill, *etc*), and add all points in the "add all" column.
3. Indicate any additional comments not included on the daily worksheets and initial your entry in the "Tech Initials" column.
4. **It is not necessary for you to compute full rotation totals. Note that the evaluation form has a blank area which indicates "PROGRAM USE ONLY - DO NOT FILL IN". Program faculty will make these calculations.**
5. Please check for accuracy and legibility of the Diagnostic Evaluation Worksheet entries, as these forms constitute part of the student's permanent academic record.

Interpretive Guidelines For Point System and Point Value Grids

The Program must assure uniformity, objectivity and consistency in students' diagnostic evaluations among all clinical affiliate sites. The point value system has been developed to standardize this evaluation process. Point values are based on a combination of (1) differentiation of cytologic criteria and (2) potential clinical implications of the cytologic diagnosis. Categories reflect, to the extent possible, current knowledge of biologic behavior, available treatment methods, and contemporary terminology recommended for cytologic diagnoses. To assure consistency of evaluation for each student attending multiple sites, as well as consistency of sites evaluating multiple students, the Program Director reviews each entry on each evaluation form.

Gynecologic Diagnosis:

The Program recognizes that gynecologic cytology criteria and diagnostic parameters are subject to variability among laboratories and practitioners, notwithstanding the establishment and availability of national standards for diagnostic criteria and reporting terminology in recent years.

Students are required to categorize their gynecologic diagnoses according to **The Bethesda System 2001 (TBS III)**. However, the necessity to monitor and evaluate student progress and competence throughout the Cytotechnology education program in some instances requires that students indicate their diagnoses with greater specificity than the Bethesda System is intended to convey in the clinical setting. These instances are reflected in the **Gyn Point Value Grids and Guidelines**.

Non-Gynecologic Diagnosis:

Some diagnostic categories in the Non-Gynecologic Cytology Grid encompass a broad range of cytologic changes. Therefore, discretion should be exercised when deducting or adding points. Ideally, diagnostic differences should be resolved by the Pathologist. If this is not possible, the Program Director will serve as the final arbiter for diagnostic discrepancies and assignment of point values.

Assessing Student Clinical Microscopic Performance:

Students are not expected to perform at the diagnostic level of cytopathologists. The student's initial interpretation of previously unevaluated slides is benchmarked to the initial cytotechnologist reviewer interpretation. When a student diagnosis matches the reviewing cytotechnologist diagnosis, subsequent change of that diagnosis by a cytopathologist does not incur a point deduction. When there is a diagnostic discrepancy between the student and reviewing cytotechnologist, and the final cytopathologist diagnosis matches with the student, no point deduction is incurred.

The numbers printed in the columns of the Diagnostic Microscopy Evaluation form sample, below, correspond to the guideline sections on the following pages.

rev. 04/03		DEPARTMENT OF LABORATORY SCIENCES - CYTOTECHNOLOGY PROGRAM											
Student: _____										DIAGNOSTIC MICROSCOPY EVALUATION			
Site: _____					Days: from: ___/___/___ to ___/___/___					THIS IS A PERMANENT STUDENT RECORD			
Enter Point Deductions by Category:													
DATE	# Cases Read		Specimen Adequacy		Diagnostic Discrepancies			Organism Detection Skill	Locator/ Detector Skill	Protocol QC/QA	Other: Specify	COMMENTS?	Clinical Instructor Initials
	GYN	N-GYN	GYN	N-GYN	UNDERCALL	OVERCALL	OTHER						
			1				2		4	3	5	6,7,8	9
Total Days:		Cases		Slides								DO NOT WRITE IN THIS AREA - PROGRAM USE ONLY	
Attended		GYN	N-GYN	GYN	N-GYN								
Screened		Total Cases Read		Cases/Day		Total Slides Read		Slides/Day					

**SPECIMEN
ADEQUACY**

1

ADEQUACY OF THE SPECIMEN FOR DIAGNOSIS:

N.B. Any cellular abnormality is of significance regardless of specimen adequacy. If abnormal cells or other significant findings are present, the specimen must never be classified as unsatisfactory. In this situation, students should identify the cellular abnormality or significant finding, and indicate why the specimen is limited.

Student:	Point deduction
1. made diagnosis on *Unsatisfactory/*Non-diagnostic specimen	- 20
2. called diagnosable specimen *Unsatisfactory/*Non-diagnostic	- 20
3. missed **Descriptor Comments:	
a. Drying artifact	- 5
b. Limited cellular material/Scant cellularity	- 5
c. Poor cellular preservation/fixation	- 5
d. Inflammatory exudate or blood obscuring cells	- 5
e. Excessive cytolysis or autolysis	- 5
f. lack of pertinent clinical history	- 5
g. ***No endocervical/T-Zone component identified	- 10
h. No ec/T-Zone component identified <u>but correct</u> diagnosis of LSIL or above	- 5
i. ****Specimen not representative of anatomic site	- 10

Definitions to be used to assess specimen adequacy:

*** Unsatisfactory for Evaluation (Gynecologic specimens)**

- Specimen Rejected/Not Processed: Specify reason [eg: lack of patient identification on slide; technically unacceptable slide (broken and cannot be repaired), or cellular material that is inadequately stained]
- Specimen Processed and Examined, but Unsatisfactory for Evaluation: Due to:
 - Too few squamous cells [Lack of an ectocervical squamous epithelial component]
 - Poor preservation [inflammation, thick areas and/or foreign material, poor fixation, drying artifact involving 75% or more of cells that precludes interpretation]
 - Totally obscured by blood

*** Unsatisfactory/Non-diagnostic (Non-gynecologic specimens) due to:**

- Acellularity
- Poor fixation/preservation precluding interpretation
- Drying artifact precluding interpretation
- Technically inadequate (staining, etc) precluding interpretation

**** Descriptor Comments**

- Lack of pertinent clinical patient information
- Obscuring blood, inflammation, thick areas and/or foreign material, poor fixation, drying artifact involving approximately 50% - 75% of cells that precludes interpretation
- Lack of an endocervical and/or transformation zone component

***** Endocervical and/or Transformation Zone component**

- At least 10 well-preserved glandular and/or squamous metaplastic cells in specimens from pre- or post-menopausal women with a cervix
(This requirement is not applicable in specimens with advanced atrophic changes)

****** Specimen not representative of anatomic site (applies to gyn and non-gyn specimens)**

- Wrong cell population for specimen type indicated (eg: follicular cells in lung specimen) that is not explainable by metastatic disease or ectopic condition

**DIAGNOSTIC
DISCREPANCY**

2

DIAGNOSTIC DISCREPANCIES:

Refer to the **POINT VALUE GRIDS** and **GUIDELINES** to determine the correct number of points to be deducted for a diagnostic discrepancy between the student and the reviewing Cytotechnologist and morphologic criteria for diagnoses.

LOCATOR**SKILL****3****LOCATOR/DETECTOR SKILL: MORPHOLOGIC RECOGNITION:**

	<u>Point deduction</u>
1. Insufficient type or number of cells marked to warrant diagnosis rendered	- 5
2. Wrong cell population marked for diagnosis rendered	- 5
3. Unnecessary/excessive dotting/marking of non-diagnostic material (cellular or non-cellular)	- 2
4. undetected Radiation/Chemotherapy changes	- 3
5. undetected/misdiagnosed tubal metaplasia	- 2
6. undetected Miscellaneous artifacts or findings	each - 1
7. endometrial/endocervical cells called tubal metaplasia, or vv.	- 5
8. Other reportable finding(s) [Gyn or Non-Gyn],	each - 2

ORGANISM**DETECTION****4****DETECTION OF ORGANISMS:**

* 1. undetected <i>Trichomonas vaginalis</i>	- 1
2. undetected Fungal organisms (including <i>Candida</i> spp.)	- 1
3. undetected Coccobacillary organisms/Shift in vaginal flora	- 1
4. undetected <i>Actinomyces</i> spp. or other filamentous bacteria	- 2
5. undetected <i>Chlamydia</i> spp., subject to confirmation	- 2
6. undetected Herpes/viral cytopathic changes <u>other than HPV</u>	- 4
7. undetected opportunistic organisms in a non-gyn specimen	- 4

* for #1-7 in this category, points may be deducted for identifying organisms/cellular changes not present

PROTOCOL**QC/QA****5****PROTOCOL: QUALITY ASSURANCE and QUALITY CONTROL**

1. Specimen or diagnosis matched incorrectly to requisition/report form	- 25
2. Incorrect interpretation based on clinical history provided	- 15
3. Illegible worksheet entry and/or communication error	- 5
4. Not calling for clinical information on cases with incomplete history	- 6
5. Not retrieving/researching previous slides and/or records in light of current abnormal case (retrospective review)	- 6
6. Improper documentation/filing (accession number, specimen type, number of cases/slides read, reports)	- 5
7. No maturation index when requested on vaginal specimen, or MI on non-vaginal specimen, unless clinically indicated	- 4
8. Specific diagnosis not entered by student; inappropriate or incorrect terminology used. <i>E.g.:</i> Entry of "positive" or "suspicious" without further explanation. If lab uses nonspecific terms, student diagnosis must be written as, e.g. "suspicious for <i>pancreatic adenocarcinoma</i> "	- 5
9. Two or more diagnoses rendered on one case, and/or a misleading diagnosis (eg: HSIL and Cancer present; Neg/NILM and Reactive (because designation of "reactive" requires Pathologist review per CLIA '88 regulations))	- 7

NOTE: Points may be deducted in more than one category eg. - Cells not marked (-5) therefore diagnosis missed (moderate dysplasia called negative (-8) therefore previous cases not pulled/researched (-6) for a total deduction on this case of -19.

**XTRA
CREDIT
POINTS**
6

EXTRA CREDIT POINTS:

A total of +2 points (extra credit) may be added for each non-negative or unusual negative case that has been completely researched when presented to the Cytotechnologist reviewer. Extra credit points are not assigned for "good calls" or "difficult cases".

**ADD ALL
(+/-)
PTS**
7

ADD ALL PLUS/MINUS POINTS:

Total all points deducted and added and enter in this column. If extra credit points have been assigned, indicate reason under "comments".

COMMENTS
8

COMMENTS:

Add any comments which help to clarify/explain points assigned.

**TECH
INITIALS**
9

TECH. INITIALS:

The reviewing Cytotechnologist should place his/her initials in this column to verify that each daily worksheet and appropriate slides/cases have been reviewed with the student.

Reporting Category:Criteria Guideline:***Negative for Intraepithelial Lesions or Malignancy (NILM/NEG)***

- Negative; clean sample with no or few inflammatory cells. May include presence of organisms as additional notation only when no cytopathic inflammatory effect is present. (eg: infestation, NOT infection)

NILM/NEG with Other Descriptors: Non-neoplastic findings• **Infection**

- Presence of fungal, bacterial, protozoal or viral organism(s), which includes associated cellular +/- or organism-related inflammatory response

• **Reactive Changes**

- Inflammation

- Minimal nuclear enlargement without substantial variation in nuclear size and shape; occasional bi- or multinucleation; mild hyperchromasia with uniform chromatin structure and distribution; nuclear outlines smooth; may be associated inflammatory infiltrate

- Atrophic Vaginitis/Cervicitis

- Parabasal cells admixed with abundant granular inflammatory background; frequent hyperchromatic nuclei with degenerative changes (coarse, smudged chromatin, pyknosis); basophilic or eosinophilic cytoplasm

- Radiation, Chemotherapy

- Markedly increased cell size without proportional N/C ratio; nuclear enlargement, hyperchromasia, and degeneration; nucleoli; cytoplasmic vacuolization and polychromasia [Chemotherapy changes should be

supported by history]

- Intrauterine contraceptive device (IUD)

- Cells occurring in small clusters of 5-30 cells; clean background; enlarged nuclei, hyperchromasia and coarse chromatin; nucleoli; cytoplasmic vacuoles may displace nuclei

- Hyperkeratosis; Parakeratosis

- Anucleated cells or miniature cells with pyknosis, in sheets/plaques; NO pleomorphism

• **Typical Repair**

- Minimal to slight nuclear enlargement without substantial variation in nuclear size and shape; occasional bi- or multinucleation; mild hyperchromasia with uniform chromatin structure and distribution; nuclear outlines smooth; nucleoli present in every nucleus; uniform architecture within cell aggregate

Epithelial Cell Abnormality:• **Atypical Squamous Cells - of Undetermined Significance (ASC-US)**

specify

- ASC-US

or

- ASC-H (cannot exclude HSIL)

- Nuclear enlargement $>70 \mu^2$ and $<125 \mu^2$, with or without hyperchromasia; mildly increased N/C ratio; variation in nuclear size and shape; occasional binucleation; nuclear outlines smooth, regular, but occasionally mildly irregular; small nucleoli may be present. These changes can not be explained by a coexisting inflammatory process and do NOT otherwise meet criteria for LSIL. May include changes formerly referred to as Atypical Repair. Does NOT include diagnostic HPV cytopathic effects or Typical Repair

• **Low-Grade Squamous Intraepithelial Lesion:**

- HPV-cytopathic effect

- Well-defined, optically clear perinuclear cavity with peripheral dense rim of cytoplasm AND smudged or degenerated nuclei, hyperchromasia, nuclear enlargement $>3x$ normal, increased N/C ratio, moderate variation in nuclear size and shape, bi- or multi-nucleation, distinct cell borders. Cells must show nuclear abnormalities to be diagnostic for LSIL.

- Dysplasia (Slight/Mild); CIN I; Low Grade CIN

- Must meet cytomorphic criteria as in W.H.O. or CIN classification systems; morphologic subclassification (keratinizing, nonkeratinizing, metaplastic) should be indicated where possible

• **High-Grade Squamous Intraepithelial Lesion:**

- Dysplasia (Moderate, Severe); CIN II, CIN III; High Grade CIN

- Cells occur singly or in sheets; nuclear abnormalities occur predominantly in immature squamous cells, occasionally in mature keratinized cells; nuclear enlargement with marked increase in N/C ratio; hyperchromasia; chromatin may be fine / coarse with uniform distribution; ; nuclear outlines irregular; nucleoli generally absent; transitionally mature cells = Moderate; Immature cells = Severe.

Students must indicate morphologic subclassification.

- Carcinoma in situ/CIN III/ High Grade CIN

- Cells are very immature or undifferentiated, and may occur singly or in syncytial aggregates; nuclear enlargement with marked increase in N/C ratio; hyperchromasia; chromatin may be fine or coarse with uniform distribution; nuclear outlines irregular; nucleoli generally absent.

Students must indicate morphologic subclassification.• **Squamous Cell Carcinoma:**

- Microinvasive Carcinoma

- For purposes of this evaluation, cells must have features of carcinoma in situ, but where some cells within aggregates have irregular chromatin distribution and nucleoli, and where tumor diathesis is not present; a few isolated cells with these features may be present

- Invasive Carcinoma

- Cells must have features of HSIL AND macronucleoli, markedly irregular chromatin distribution, coarse chromatin clumping, parachromatin clearing associated tumor diathesis often present. Morphologic subclassification (keratinizing, large cell, small cell) should be indicated where possible. Where a second component is present (eg: glandular malignancy) that component should be indicated

- Keratinizing Cancer called Adenocarcinoma;

- These categories recognize the distinct morphologic differences between the lesions indicated; the cytologist should be able to discriminate lesions based on cellular configuration and size

- Small Cell Cancer called Large Cell Ca

CYTOTECHNOLOGIST DIAGNOSIS -->																	
STUDENT DIAGNOSIS	2. DIAGNOSTIC TARGETS/ DISCREPANCIES																
	Negative for Intraepithelial Lesions or Malignancy (NILM)	Infection: *see listing for points	Reactive: [Inflam,AV,RRx,IUD,HK,PK]	Repair	ASC-US	ASC-H	LSIL: HPV-Cytopathic Effect	LSIL: Dysplasia (Mild/CIN I)	HSIL: Dysplasia (Moderate/CIN II)	HSIL: Dysplasia (Severe/CIN III)	HSIL: CIS/CIN III	Squamous Cell Carcinomas	Microinvasive Carcinoma	Invasive (Frank) Carcinoma, Pure or Mixed	Keratinizing Ca Called AdenoCa or VV	Small Cell Cancer Called Large Cell Ca or VV	
Negative for Intraepithelial Lesions or Malignancy (NILM)	0	-	-2	-4	-5	-6	-6	-7	-8	-10	-10	-10	-10	-10	---	---	
ASC with Other Descriptors:																	
Infection: *see listing for points	-	0	-2	-3	-4	-5	-5	-6	-8	-10	-10	-10	-10	-10	---	---	
Reactive: [Inflam,AV,RRx,IUD,HK,PK]	-2	-1	0	-1	-3	-5	-5	-6	-8	-9	-9	-9	-9	-10	---	---	
Repair	-3	-2	-1	0	-2	-3	-4	-5	-8	-9	-9	-9	-9	-10	---	---	
Epithelial Cell Abnormalities:																	
ASC-US	-4	-3	-3	-2	0	-2	-2	-2	-5	-6	-7	-9	-10	---	---		
ASC-H	-5	-4	-3	-2	-2	0	-2	-2	-4	-3	-4	-9	-10	---	---		
LSIL: HPV-Cytopathic Effect	-5	-4	-3	-2	-2	-1	0	-2	-6	-7	-8	-9	-10	---	---		
LSIL: Dysplasia (Mild/CIN I)	-5	-5	-4	-3	-2	-2	-1	0	-4	-6	-8	-10	-10	---	---		
HSIL: Dysplasia (Moderate/CIN II)	-9	-8	-7	-6	-4	-2	-2	-2	0	-4	-6	-9	-10	---	---		
HSIL: Dysplasia (Severe/CIN III)	-9	-9	-9	-8	-4	-2	-4	-3	-2	0	-2	-7	-8	---	---		
HSIL: CIS/CIN III	-10	-9	-9	-9	-8	-5	-7	-7	-4	-2	0	-4	-5	---	---		
Squamous Cell Carcinomas:																	
Microinvasive Carcinoma	-10	-10	-9	-9	-9	-7	-8	-7	-6	-4	-2	0	0	-10	-8		
Invasive (Frank) Carcinoma, Pure or Mixed	-10	-10	-9	-9	-9	-8	-9	-9	-7	-5	-4	0	0	-10	-8		
Keratinizing Ca Called AdenoCa or VV	---	---	---	---	---	---	---	---	---	---	---	---	---	-10	---		
Small Cell Cancer Called Large Cell Ca or VV	---	---	---	---	---	---	---	---	---	---	---	---	---	---	-8		
GYNECOLOGIC CYTOLOGY - SQUAMOUS - POINT VALUE GRID																	

Negative for Intraepithelial Lesions or Malignancy (Negative) [Endometrial Cells, Cytologically Benign]

- In a Cyclic Woman <40y,
 - For purposes of this evaluation, report as "Endometrial cells present, cytologically benign" [Spontaneously exfoliated endometrial cells may appear in gynecologic specimens during the proliferative phase of the menstrual cycle. This is a low-risk finding]
- **In a woman $\geq 40y$**
 - For purposes of this evaluation, report as "Endometrial cells present in a woman ≥ 40 ".
- No Menstrual History Provided
 - For purposes of this evaluation, report as "Endometrial cells present"

Negative for Intraepithelial Lesions or Malignancy (Negative) (with Non-neoplastic findings in Glandular Cells)

- **Reactive/Reparative Endocervical Cells**
 - Prominent nucleoli present in endocervical glandular cells; Nuclei maybe normal size with uniform chromatin distribution (see criteria for Typical Repair). Cell aggregates must meet cytologic criteria for a reparative process
- **Intrauterine contraceptive device (IUD)**
 - Glandular cells (endometrial or endocervical) occurring in small clusters of 5 - 30 cells; clean background; enlarged nuclei, hyperchromasia and coarse chromatin; nucleoli; cytoplasmic vacuoles may displace nuclei
- **Other (Specify and Describe)**
 -

Epithelial Cell Abnormality: Glandular Cells:**Atypical NOS [Not Otherwise Specified]**

- Cells showing glandular differentiation but not specific for endocervical or endometrial morphology, displaying nuclear atypia that exceeds obvious reactive or reparative range but lacking unequivocal features associated with preneoplastic or neoplastic endocervix (AIS) or endometrial atypical hyperplasia/complex hyperplasia. May also include cells that are too few in number and/or obscured such that more specific diagnosis is not possible.

Atypical (Favor Neoplastic)**- Endocervical Cells**

- Cells showing endocervical differentiation displaying nuclear atypia consistent with neoplastic changes but lacking unequivocal features of adenocarcinoma in situ. Cells in sheets or strips with minor nuclear overlapping; nuclear enlargement 3-5x normal; mild variation in nuclear size and shape; hyperchromasia with nuclear degeneration and/or irregular chromatin distribution; small nucleoli; abundant cytoplasm and distinct cell borders. May also include endocervical cells that are too few in number and/or obscured such that more specific diagnosis is not possible.

• Endometrial Cells

- Cells in small cell groups, usually 5-10 cells; minimal nuclear enlargement; hyperchromasia; mildly irregularly distributed chromatin; small nucleoli; ill-defined cell borders; scant cytoplasm, occasionally vacuolated. This category includes the specific diagnosis of endometrial atypical/complex hyperplasia

Endocervical Adenocarcinoma in situ (AIS)

- Abnormal cells in strips and rows, but may be single or in rosettes and sheets; diminished granular to vacuolated cytoplasm and ill-defined nuclear borders; increased N/C ratio; palisading nuclear arrangement with irregular borders (feathering); marked architectural alterations (nuclear crowding and overlapping); nuclear stratification and elongation; hyperchromasia; chromatin finely to moderately granular; nucleoli often inconspicuous.

Adenocarcinoma:**• Endocervical**

- Criteria for AIS PLUS single cells with macronucleoli, irregular chromatin clumping and clearing, tumor diathesis; subclassification (eg: clear cell type) should be indicated

• Endometrial

- Single cells or small, loose clusters; nuclei enlargement depending on degree of differentiation; higher grade tumors display moderate hyperchromasia, irregular chromatin clumping, clearing, and prominent nucleoli; cytoplasm scant, cyanophilic, often vacuolated tumor diathesis variable; subclassification should be indicated.

• Extrauterine

- Adenocarcinoma cells in clean or serous background

Other Malignant Neoplasms:**• Sarcoma (Pure)**
-Endometrium/Myometrium

- Must meet generally recognized cytomorphologic criteria for sarcomatous malignancies; subclassification (eg: stromal sarcoma) should be indicated

• Mixed Mesodermal Tumor
-Endometrium

- Must meet generally recognized cytomorphologic criteria for endometrial glandular malignancy; indicate subclassification of the sarcomatous component

• Other (Specify and describe)

-

• Well-Differentiated Adeno called
Poorly Differentiated Adeno or *ViceVersa*

- This category recognizes the distinct morphologic differences between the lesions indicated; the cytologist should be able to discriminate between lesions based on cellular configuration and size

←--- STUDENT DIAGNOSIS	CYTOTECHNOLOGIST DIAGNOSIS -->														
	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	#	-10	-10	-10	
<p style="text-align: center;">2. DIAGNOSTIC TARGETS/ DISCREPANCIES</p>	Endometrial Cells in Cyclic Woman <40y	-1	0	-6	-3	-2	*	-5	-3	-3	-3	-10	-10	-10	-10
	Endometrial Cells in woman ≥40y	-2	-6	0	-3	-2	*	-6	-3	-3	-3	-10	-10	-10	-10
	Reactive/Reparative Endocervical Cells	-3	-3	-3	0	-2	*	-4	-8	-8	-6	-9	-10	-10	-10
	Reactive Endometrial Cells/IUD Changes	-3	-1	-1	-2	0	*	-4	-8	-6	-7	-8	-10	-10	-10
	Other: Specify and Describe	*	*	*	*	*	0	-4	-6	-6	-8	-8	-10	-10	-10
	Atypical: NOS (EC, EM, Glandular-NOS)	-4	-3	-3	-2	-2	-3	0	-6	-4	-4	-3	-10	-10	-3
	Endocervical: Favor Neoplastic	-8	-6	-6	-5	-6	-5	-4	0	-6	-2	-4	-8	-8	-8
	Glandular (Inc Endom Complex Hyperplasia)	-8	-6	-4	-4	-4	-5	-4	-5	0	-4	-6	-10	-8	-8
	Endocervical Adenocarcinoma in situ	-3	-8	-7	-6	6	-5	-3	-2	-4	0	-2	-3	-3	-10
	Endocervical / Endometrial / Extrauterine	#	-3	-3	-8	-8	-8	-6	-4	-4	-1	0	-6	-4	-5
	Sarcoma (Pure): Endometrium/Myometrium	#	-3	-3	-8	-8	-8	-6	-5	-5	-4	-6	0	-4	-5
	Mixed Mesodermal Tumor: Endometrium	#	-3	-3	-3	-8	-8	-8	-8	-7	-5	-4	-4	0	-4
	Other Malignant Neoplasm (Specify)	#	-3	-3	-3	-8	-8	-8	-8	-7	-5	-4	-4	-4	0
	*Well-diff AdenoCa called Poorly Diff or VV														
*AdenoCa called Keratinizing Ca or VV															-10

* Other Non-neoplastic findings must be fully described by student.
This diagnostic category can NOT be used in lieu of a specific diagnosis.

GYNECOLOGIC CYTOLOGY - GLANDULAR - POINT VALUE GRID

Non-Gynecologic Cytology, including Fine Needle Aspiration

Unsatisfactory/Non-Diagnostic

- Refer to page 25 "Adequacy of the Specimen for Diagnosis"

Reporting Category:

Criteria/Guideline:

Negative

- No pathologic diagnosis (Normal Cytology for Organ or Tissue)

Negative with Inflammatory Changes

- Slight nuclear enlargement that can be related to a specific or non-specific causative agent, or that is consistent with a generalized inflammatory background; the nuclear changes are considered to be within normal limits

Benign Reactive Process (BRP)

- Nuclear and/or cytoplasmic evidence of reactive or hyperplastic process that can be related to a specific or non-specific causative agent, or which is consistent with a generalized inflammatory background

Reportable Inflammatory Process -including Organisms

- Evidence of specific inflammatory process or agent, with or without cellular inflammatory response, which if not reported might affect course of patient treatment
- Reportable Inflammatory Process includes, eg, *P. jiroveci/carinii*, Colitis, Cystitis, Fat Necrosis; with or without Organisms

Reportable Benign Process

- Process composed of benign cells, the presence of which would constitute a clinically significant differential diagnosis (eg: fibroadenoma v. breast carcinoma; colloid nodule v. thyroid carcinoma)

Atypical Cells (NOT Associated with Inflammation or BRP)

- Applies to nuclear enlargement and/or hyperchromasia and/or chromatin irregularities, which can not be explained by a coexisting inflammatory and/or reactive process, but does not otherwise meet the cytologic criteria for malignancy
- Atypical Cells NOT Inflamm or BRP includes, eg, Ductal Hyperplasia, Atypical Metaplasia of Bronchii

Abnormal Cells Present: Rule Out Malignancy
[encompasses "Suspicious" and "Inconclusive for Malignancy" in labs using these terms]

- Probable malignant cells present, however because of inadequacies in sample collection or technical preparation a definitive diagnosis cannot be made; cell type must be specified where possible (eg: abnormal cells of squamous type (or origin) present)

Squamous Cell Carcinoma; Adenocarcinoma

- Must meet generally recognized cytomorphologic criteria for squamous or glandular malignancy; subclassification (eg: keratinizing; ovarian origin) should be attempted where possible
May include diagnosis of "Non-Small Cell Tumor" However, type must be suggested.

Other Epithelial Malignancy with Large Tumor Cells

- Must meet generally recognized cytomorphologic criteria of malignancy for the involved cell type; cell type must be specified. May include diagnosis of "Non-Small Cell Tumor"
- Other Epithelial Malignancy with Large Cells includes, eg, Transitional Cell Carcinoma, Mesothelioma, Melanoma, Renal Cell Ca, etc

Non-Epithelial Malignancy with Large Tumor Cells

- Must meet generally recognized cytomorphologic criteria of malignancy for the involved cell type; cell type must be specified (eg: chondrosarcoma)

Small Cell Malignancy, EXCLUDING Oat Cell Type

- Must meet generally recognized cytomorphologic criteria of malignancy for the involved cell type; cell type must be specified
- Small Cell Malignancy, NOT Oat Cell, includes, eg, Carcinoid Tumor, Retinoblastoma, Neuroblastoma, etc

Small Cell Malignancy, Oat Cell Type

- Must meet generally recognized cytomorphologic criteria for oat cell carcinoma of lung

Lymphoma or Leukemia

- Must meet generally recognized cytomorphologic criteria for the involved lympho/reticular cell type; morphologic type should be specified where possible (eg: large cell, histiocytic lymphoma, Hodgkin disease)

Student: _____

SS#: XXX-XX- _____

CLINICAL SUMMARY EVALUATION

Program: ___ 2+2BS ___ 3+1BS ___ 4+1ProfMS ___ 3+2BSMS

THIS IS A PERMANENT STUDENT RECORD

Term: _____ Year: _____ Course: **CT LS** _____

Clinical Site:

Calendar Days Scheduled: ___ / ___ / ___ to ___ / ___ / ___ inclusive

M T W R F S S

Diagnostic and Technical/Professional Notations:

		Clinical Site Recommendation	
		Highly Recommended	(98-100%)
		Recommended	<input type="checkbox"/> (90-97%)
		Not Recommended	<input type="checkbox"/> (< 90%)
		Unable to Evaluate	<input type="checkbox"/> see T/P Eval
		Did Not Indicate	<input type="checkbox"/>

Grade Computation

TOTALS

						Slides/Hour Calculation	Diagnostic Evaluation	Tech/Prof Evaluation
Total Days Scheduled This Practicum: _____	Total Days Completed	Total Gyn Cases	Total NonGyn Cases	Total All Cases	Cases/Day	Reported Prescreen Hours	Dx %	T/P %
M T W R F							Dx Letter Grade	T/P Letter Grade
Minimum # Days Required This Practicum: _____	Total Screen Days	Total Gyn Slides	Total NonGyn Slides	Total All Slides	Slides/Day	# Prescreen Slides	_____ OP x.60	_____ OP x.40
# Make-Up Days Req'd For Practicum: _____							Dx OP	Total Qual Pts
						Slides/Hour	T/P OP	Final Letter Grade
							Faculty: Initial/Date	

TECHNICAL & PROFESSIONAL EVALUATION, Page 2 of 3

Student _____

Clinical Site _____

Graduate /Undergraduate: **A+ A A- B+ B B- C+ C C- D+ D D- F**

	100	99	98	97	96	95	94	92	90	89	87	85	<85
<u>Under minimal supervision, the student was able to:</u>													
H. detect cellular manifestations of disease, and develop a differential diagnosis based on cellular evidence in conjunction with 1. review of previous patient material 2. correlation with current histologic/cell block specimens 3. an understanding of clinical data, significance of symptoms and/or modes of treatment, and their effects on cytologic interpretation													
I. use appropriate diagnostic terminology to prepare written reports and in discussions with the Cytotechnologist, Pathologist or Clinician, according to established laboratory procedure													
J. demonstrate ability to review histologic tissue sections or other adjunct diagnostic technologies, as appropriate for cytologic diagnosis & cyto-histocorrelation, clinical correlation, and/or QC/QA													
K. demonstrate initiative in seeking out and reading published literature and/or procedure manuals as necessary for accurate preparation, diagnosis and transmittal of cytologic specimens and reports													
M. demonstrate familiarity with and/or use of appropriate laboratory safety measures and laboratory regulations as necessary													
<u>During this rotation, this student:</u>													
N. practiced discretion and confidentiality with lab & patient reports													
O. related specimen evaluation to the significance and impact of such evaluations on patient care													
P. accepted constructive criticism, modified behavior accordingly in response to supervision, followed directions carefully, showed maturity in dealing with problems													
Q. practiced honesty and integrity in daily duties; and truthfulness in relationships with peers and staff													
R. practiced good interpersonal communication skills with peers, laboratory personnel and faculty													
S. organized work in a logical manner; maintained work area and equipment in an efficient manner; budgeted time wisely; adjusted pace to program and clinical laboratory requirements													
T. was aware that productivity, efficiency and timely result reporting contribute to good patient care and client satisfaction [G.2.]													
U. demonstrated initiative and interest in learning and cytologic practice, e.g.: seeking out and using additional study slides and/or literature to review if/when daily laboratory workload is reduced.													
V. demonstrated dependability in and accountability for the clinical experience and work environment, including scheduled attendance, punctuality, adherence to daily work schedules, prior notice for absences, assuring missed time was made up according to program requirements													
W. <u>Circle</u> adjunct diagnostic technology(ies) that the student used and/or participated in during this rotation [L.] : Use additional lines for description as needed.	Image Analysis	Flow Cytometry	Immuno-chemistry	Molecular Diagnostics	DNA Probes	Other:							

TECHNICAL & PROFESSIONAL EVALUATION, Page 3 of 3

Student _____

Clinical Site _____

1. Were there circumstances that may have influenced your evaluation of this student? Explain.

2. Were there circumstances that may have adversely influenced the student's performance? Explain.

3. At this time, how would you rate this student for employment in your area on an overall evaluation?
 Highly recommended (98-100%) Not recommended (less than 90%)
 Recommended (90-97%) Unable to evaluate

Clinical Instructor Signature _____

Date _____

Has this evaluation been reviewed with the student? YES NO

Other comments:

rev.8/09

**CLINICAL PRACTICUM SITE EVALUATION
 TO BE COMPLETED BY STUDENT**

Clinical Site _____ Clinical Instructor _____

Student: _____ Rotation dates _____ to _____

Rotation Block (circle one): I II III IV

Instructions to Student: The columns indicate categories in which you should assess your experience at this particular site. Please evaluate each category twice: (A) as a clinical site, and (B) as it compares to your previous rotation sites. If this is your first rotation, please mark "N/A" in the comparison (B) rows.

	Below Average	Average	Above Average	Truly Exceptional	Inadequate Opportunity to Observe	A This clinical site Evaluation ----- B compared to your other clinical sites
1. Site was prepared for my arrival and my clinical experience.						A ----- B
2. Professional behavior was demonstrated in the laboratory.						A ----- B
3. Adequate supervision was provided; personnel explained procedures as needed; were available for questions						A ----- B
4. Communication between lab personnel and me was beneficial and appropriate						A ----- B
5. Lab resources (patients/specimens/equipment/space, etc) were adequate.						A ----- B
6. My experiences at this site met Clinical Practicum course objectives.						A ----- B
7. Site provided activities for me to minimize "down-time"; involved me in daily activities.						A ----- B
8. Site was clean, free of clutter, and adhered at all applicable regulations (Proper disposal of waste, PPE, etc.)						A ----- B
9. Activities contributed to my knowledge and development of technical and microscopic skills.						A ----- B

STUDENT CLINICAL PERFORMANCE SELF-EVALUATION

Clinical Site _____ Clinical Instructor _____

Student: _____ Rotation dates _____ to _____

Rotation Block (circle one): **I** **II** **III** **IV**

Instructions: Use this form to evaluate **your own performance at this site**. Columns indicate numerical grades. Indicate, by assigning a **numerical grade within one column**, the level of competence at which you believe you performed in each category while on rotation in this laboratory. (eg: 86% would be entered under column labeled "89 87 85")

Graduate /Undergraduate: **A+ A A- B+ B B- C+ C C- D+ D D- F**
 100 99 98 97 96 95 94 92 90 89 87 85 <85

A. I followed all local, state, and federal regulations concerning the handling, storage, and disposal of chemicals and biohazard materials.									
B. I operated equipment properly and safely, and maintained cleanliness of equipment and my workspace.									
C. I practiced discretion and confidentiality with lab and patient records in accordance with HIPAA requirements and professional ethics.									
D. I was honest and truthful in relationships with peers and staff. I demonstrated integrity in my daily duties. I showed interest in the lab's policies and procedures and understood the lab's workflow.									
E. I practiced good interpersonal communication skills with peers, faculty, and laboratory personnel.									
F. I accepted constructive criticism, modified my behavior accordingly in response to supervision and followed directions carefully. I showed maturity in dealing with personal or lab problems.									
G. I was dependable and accepted responsibility for my clinical experience and work environment, including scheduled attendance, punctuality, adherence to daily work schedules, prior notice for absences and assuring missed time was made up. I was present at this site at least 7 hours each day, exclusive of lunch and breaks.									
H. I adhered to all personal protective equipment (PPE) regulations, including wearing gloves, laboratory coat, and/or other protection as needed when present in prep/wet laboratories or special procedures.									
I. I concentrated on my work. I did not use lab computers for personal use. I did not make or receive personal calls during lab time. I did not use rotation time to work on non-clinical class assignments.									
J. I demonstrated ability to multi-task; showed initiative to find work during "down-times"; expressed interest in laboratory activities.									
K. I evaluated slides at a rate of at least 5 slides per hour.									
L. I learned and practiced applying principles of quality control and quality assurance as required by current regulations (CLIA, CAP, JCAHO).									

Provide additional comments about this site, including explanation for "below average" ratings.

Describe this site's strengths:

Describe this site's weaknesses/areas for suggested improvement:

Would you recommend this site to others? Why or why not?

CODE OF ETHICS

Being thoroughly cognizant of my commitment to the practice and delivery of exemplary health care services in Cytotechnology, I affirm and insure my dedication to the performance of my professional duties with accuracy, thoughtfulness and care.

Recognizing that the welfare of the community and the individual patient is a principal element in my profession, I shall approach each professional task with the utmost reliability and application of highest interpretive standards and shall hold inviolate the trust placed in me by patients and physicians.

-American Society for Cytotechnology, April 1981

**American Society for Cytotechnology
Guidelines for the Ethical Practice of Cytotechnology**

The foundation of ethics is associated with honesty, justice, and courtesy forming a moral philosophy among people with mutual interest. Cytotechnologists, as professional healthcare providers shall practice their profession according to this code of ethics.

1. The cytotechnologist understands that the responsibility for the welfare of the patient supersedes responsibility to all others. The cytotechnologist acting in a professional manner shall:

- Exercise ethical judgment in decision-making processes, accept the responsibility for the consequences of these decisions and be able to acknowledge personal error.
- Abide by the rules and regulations of the laboratory or institution.

2. The cytotechnologist screens and interprets cytologic samples according to the legislative and regulatory guidelines. Under the technical supervision of a qualified pathologist, the cytotechnologist shall:

Verify the patient and specimen identification. Evaluate the specimen quality, thoroughly examine microscopically and render a final cytologic interpretation using recognized Cytopathologic terminology for gynecologic cell samples as allowed by regulations.

- Examine microscopically and render a preliminary interpretation on gynecologic samples requiring pathologist review and on all non-gynecologic samples.
- Consider the clinical data of the patient, comparing these data with the microscopic findings and assist the pathologist in formulating a final report.

3. The cytotechnologist uses principles of specimen collection, cytopreparation and laboratory safety in order to maintain an effective laboratory operation. The cytotechnologist shall:

- Ensure patient safety through correctly labeled specimens.
- Be knowledgeable and competent in the principles, techniques and instrumentation of cytopreparation.
- Assume responsibility for the identification and resolution of problems.
- Maintain a safe environment for persons in the laboratory.
- Be able to perform or to direct the performance of laboratory procedures according to the priorities of efficient patient care.

4. The cytotechnologist possesses professional credentials by maintaining certification by a recognized agency and participating in proficiency testing and self-assessment programs when available.

5. The cytotechnologist adheres to current established quality control guidelines in all phases of laboratory operation. The cytotechnologist should:

Revised January 9, 2006

- Maintain orderly, accurate daily screening workload records as required by CLIA
- Not willingly assent to employment where the workload standards are violated or where other factors do not permit adequate evaluation of specimens.

6. The cytotechnologist is familiar with the organizational principles of a Cytopathology laboratory and a Cytopathology laboratory information system. The cytotechnologist shall:

- Have a basic understanding of laboratory personnel structure, operating within a budget, and the interaction of the Cytopathology laboratory with other medical personnel.
- Have a basic knowledge of data collection and retrieval systems necessary to ensure efficient, accurate reporting of laboratory results.

7. The cytotechnologist establishes cooperative and respectful working relationships with pathologists, other physicians, and health professionals in providing effective health care for the patient. The cytotechnologist shall:

- Effectively convey information to those professionals directly responsible for patient care so that they understand how to request specific examinations, know when to expect appropriate results, and understand the reason for any request for additional clinical data or repeat sampling.
- Abide by HIPAA policy and maintain patient confidentiality, respecting all Protected Health Information (PHI)
- Recognize and respect the role of both the patient's physician and the laboratory director in the diagnostic interpretation of laboratory data and treatment of the patient.

8. The cytotechnologist maintains competency and high standards of practice and knowledge. The cytotechnologist shall:

- Participate in continuing education programs in Cytopathology
- Support professional organizations through membership and attendance at local, regional, national or international meetings
- Make every effort to uphold, maintain and improve the professional integrity and practice of cytotechnology

9. The cytotechnologist contributes to the advancement of the profession. The cytotechnologist shall:

- Strive to expand the body of knowledge
- Adopt new technologies that benefit patient care
- Maintain integrity and high standards in research, practice & education

*Guidelines for the Ethical Practice of Cytotechnology were adopted by the ASCCT April 1992. Revised October 1997.
120 * Volume XVIII * Number 9*

Revised January 9, 2006

CURRICULUM IN CYTOTECHNOLOGY
ENTRY-LEVEL COMPETENCIES

January 2005

Cytotechnology Programs Review Committee

This Curriculum in Cytotechnology was developed by the CPRC with input from cytopathology professionals to establish the minimum competencies that new cytotechnology graduates must be able to demonstrate upon entering the profession. The entry-level competencies are divided into six major categories based on the overall knowledge and/or skill set encompassed within: Screening and Interpretation, Basic Laboratory Techniques, Laboratory Operations, Ancillary Testing / New Technologies, Scientific Method of Inquiry, and Professional Development.

These entry-level competencies require that cytotechnology students optimally should have a sound background in the sciences. After input from the profession, the CPRC has also established that programs must ensure that students have a minimum of 28 credits* of sciences including chemistry and the biological sciences upon completion of a cytotechnology program and 3 credits of mathematics and/or statistics.

As mandated in the Standards and Guidelines for the Accreditation of Educational Programs in Cytotechnology (2004), cytotechnology programs must ensure that the curriculum offered in their programs prepares students to meet these entry-level competencies:

The program must demonstrate by comparison that the curriculum offered prepares students to meet, or exceed if such is stated in the program goal(s), the entry-level competencies specified in the latest edition of the Curriculum in Cytotechnology as developed by the Cytotechnology Programs Review Committee.

At minimum, these entry-level competencies will be reviewed every 2 years by the CPRC. Communities of interest will be surveyed every 5 years, or sooner if deemed necessary by the CPRC, to determine what revisions, if any, need to be made.

** Credits from a recognized, accredited university*

CYTOTECHNOLOGY CURRICULUM ENTRY-LEVEL COMPETENCIES

SCREENING AND INTERPRETATION

1. When given conventional and/or liquid-based cervicovaginal cellular samples, the cytotechnologist will be able to microscopically identify and discriminate among the following entities:
 - a. specimen adequacy
 - b. cellular constituents within the negative for intraepithelial lesion or malignancy category
 - c. non-neoplastic findings including cellular changes associated with infections, reactive and reparative changes associated with inflammation, effects of therapy, effects of mechanical devices and effects of DES exposure, glandular cells status post hysterectomy and endometrial cells in a woman 40 years or older
 - d. epithelial squamous abnormalities, including atypical squamous cells of undetermined significance, atypical squamous cells cannot exclude HSIL, low grade squamous intraepithelial lesion, high grade squamous intraepithelial lesion, and squamous cell carcinoma
 - e. glandular cell abnormalities including atypical endocervical cells, atypical endometrial cells, atypical glandular cells NOS, atypical endocervical cells favor neoplastic, atypical glandular cells favor neoplastic, endocervical adenocarcinoma in-situ, adenocarcinoma
 - f. non-epithelial malignant neoplasms
 - g. extra-uterine malignant neoplasms.
2. The cytotechnologist will be able to evaluate gynecologic material with sufficient competence to meet the entry-level responsibility of issuing the final report for negative gynecologic specimens.
3. When given cellular samples from any non-gynecologic cytology specimen, including fine needle aspirations, the cytotechnologist will be able to microscopically identify and discriminate among the following entities:
 - a. specimen adequacy
 - b. cellular constituents within normal limits
 - c. inflammatory cells
 - d. microbiologic entities associated with cytomorphology
 - e. manifestations of cellular degeneration
 - f. benign cellular changes
 - g. cellular manifestations of benign neoplasms
 - h. cellular manifestations of malignant neoplasms
 - i. cellular effects of radiation and chemotherapy
 - j. altered cellular morphology due to collection methods
4. When given a cellular preparation, the cytotechnologist will be able to detect, select, and appropriately mark the cells most representative of the nature of any pathological process.
5. The cytotechnologist will be able to evaluate cellular preparations with a high level of accuracy as defined by the program. Although paramount, accuracy should be combined with the realization that timely reporting of results also contributes to patient care. At **minimum**, the cytotechnologist will be able to evaluate 5 slides per hour.
6. On detection of cellular manifestations of disease, the cytotechnologist will be able to develop a differential diagnosis based on synthesis of appropriate data such as:
 - a. current cell block specimens
 - b. pertinent cognitive knowledge and clinical data
 - c. knowledge of various modes of treatment and their effect on the cytologic interpretation
 - d. review of previous patient material
7. The cytotechnologist will be able to prepare a report using a contemporary and uniform system of diagnostic terminology for gynecologic specimens, such as the Bethesda system of its equivalent, and non-gynecologic specimens.

BASIC LABORATORY TECHNIQUES

1. Upon presentation of a cytologic specimen to the laboratory, the cytotechnologist will be able to:
 - a. accept or reject the specimen
 - b. select and perform the most advantageous preparation technique
 - c. select and perform the most advantageous staining procedure
 - d. apply principles of quality control
 - e. solve problems in staining and preparation methods
2. The cytotechnologist will be able to utilize the microscope to properly visualize the specimen with knowledge of
 - a. principles of Kohler illumination
 - b. proper use, care and trouble-shooting of the microscope
 - c. appropriate and effective microscopic slide evaluation methods
3. The cytotechnologist will be able to utilize basic laboratory skills including but not limited to pipetting methods and preparation and dilutions of solutions.

LABORATORY OPERATIONS

1. The cytotechnologist will be able to explain quality control and quality assurance measures as required by current regulations (CLIA, CAP, JCAHO, HIPPA and applicable state regulations).
2. The cytotechnologist will be able to comply with laboratory safety measures and regulations.

ANCILLARY TESTING / NEW TECHNOLOGIES

1. The cytotechnologist will be able to explain the applications of new technologies to the cytopathologic diagnostic process such as, but not limited to:
 - a. HPV DNA testing
 - b. Flow cytometry
 - c. Immunohistochemical techniques
 - d. FISH
 - e. PCR
 - f. Immunophenotyping
 - g. Automated screening devices.

SCIENTIFIC METHOD OF INQUIRY

1. The cytotechnologist will be able to demonstrate the ability to read and evaluate published professional literature for its pertinence and reliability and will be able to explain the basic principles of the scientific method through such methods as research projects, journal club and seminars.

PROFESSIONAL DEVELOPMENT

1. The cytotechnologist will be able to explain the importance of continuing education for maintenance of on-going competence, demonstrate knowledge of the consequences of specimen evaluation on patient management, and explain the importance of the cytotechnologist's role in the health care system.
2. The cytotechnologist will be able to demonstrate knowledge of the ethical role and responsibilities of the cytotechnologist by practicing:
 - a. honesty and integrity in professional duties
 - b. the principles of good personal relationships with peers, staff, faculty and the public.

SCHEDULE FOR PRACTICUM ROTATIONS
ACADEMIC YEAR 2011-2012 (SEPTEMBER 11 – AUGUST 12)
for Undergraduate and Graduate Practicum Courses

Fall '11	M	T	W	R	F	
Sept	5	6	7	8	9	
	12	13	14	15	16	Block I (9/12 Student Practicum Meetings) 9/13 - 10/14 T,W,R,F 20 Days
	19	20	21	22	23	
	26	27	28	29	30	
Oct	3	4	5	6	7	
	10	11	12	13	14	
Oct	17	18	19	20	21	
	24	25	26	27	28	
Nov	31	1	2	3	4	Block II 11/1 - 12/09 T,W,R,F 20 Days
	7	8	9	10	11	
	14	15	16	17	18	
	21	22	23	24	25	
Dec	28	29	30	1	2	
	5	6	7	8	9	
	12	13	14	15	16	
	19	20	21	22	23	
	26	27	28	29	30	

Spring '12	M	T	W	R	F	
Jan	2	3	4	5	6	
	9	10	11	12	13	
	16	17	18	19	20	Block III 1/17 – 2/17 T,W,R,F 20 Days
	23	24	25	26	27	
Feb	30	31	1	2	3	
	6	7	8	9	10	
	13	14	15	16	17	
	20	21	22	23	24	
Mar	27	28	29	1	2	
	5	6	7	8	9	(March 5-9: Spring/Practicum Break)
	12	13	14	15	16	Block IV 3/13 – 4/13 T,W,R,F 20 Days
	19	20	21	22	23	
Apr	26	27	28	29	30	
	2	3	4	5	6	
	9	10	11	12	13	
	16	17	18	19	20	
	23	24	25	26	27	

SUMMER '12 SCHEDULE

Summer I '12		M	T	W	R	F	
April		23	24	25	26	27	(4/26 or 27 Student Practicum Meetings)
May		30	1	2	3	4	Block I 4/30 - 5/25
		7	8	9	10	11	M,T,W,R,F = 19 Days
		14	15	16	17	18	(May 14 Commencement)
		21	22	23	24	25	
May/June		28	29	30	31	1	Block II 5/29 - 6/22 (May 28: Holiday)
June		4	5	6	7	8	M,T,W,R,F = 19 Days
		11	12	13	14	15	
		18	19	20	21	22	
		25	26	27	28	29	Block III 6/25 - 7/20
July		2	3	4	5	6	M,T,W,R,F = 19 Days (July 4: Holiday)
		9	10	11	12	13	
		16	17	18	19	20	
		23	24	25	26	27	Block IV 7/23 - 8/17
		30	31	1	2	3	M,T,W,R,F = 20 Days
Aug		6	7	8	9	10	
		13	14	15	16	17	
		20	21	22	23	24	August 20-30 Available for Make-Up days
		27	28	29	30	31	Program Completion - Aug 31

Minimum Total Days Required Summer = 77

