

# DEPARTMENT OF CLINICAL LABORATORY SCIENCES

SCHOOL OF HEALTH TECHNOLOGY AND MANAGEMENT

THE UNIVERSITY AT STONY BROOK

STONY BROOK, NEW YORK 11794-8205

## MICROBIOLOGY COMPETENCY EVALUATION FORM

STUDENT NAME: \_\_\_\_\_ CLINICAL AFFILIATE: \_\_\_\_\_

Section: \_\_\_\_\_ Duration: \_\_\_\_\_ Supervisor/Instructor: \_\_\_\_\_

### Instructions:

1. The student must complete all pertinent objectives/checklist items in order to complete the rotation within each section. If the items are not applicable, indicate "n/a."
2. The evaluator(s) must document the student's acceptable performance in meeting the established tasks in the **Laboratory Safety and Infection Control, Quality Control and Microbiology Procedures and Protocols categories** by putting the date the task was performed. The evaluator(s) must document the student's acceptable performance in meeting the established tasks in the **Microbiology Test Skills and Affective Skills category** by checking the appropriate column (1 = none of the time, 2 = some of the time, 3 = most of the time, 4 = all of the time).
3. The instructor and student must sign this form after it has been completed at the end of the clinical rotation.

LABORATORY SAFETY AND INFECTION CONTROL	DATE PERFORMED	EVALUATOR SIGNATURE
1. IDENTIFIES LOCATION OF SAFETY DEVICES		
A. Fire Extinguishers		
B. Fire Alarms		
C. Fire Blankets		
D. Eye Washes		
E. Emergency Exits		
F. Safety Showers		
G. First Aid Kit		
H. Incident Reports		
2. REVIEWS DEPARTMENT'S PROTOCOL FOR HANDLING BLOOD & BODY FLUIDS		

QUALITY CONTROL	DATE PERFORMED	EVALUATOR SIGNATURE
PERFORMS APPROPRIATE QC PROCEDURES ACCORDING TO PROTOCOL:		
A. Reagents (latex agglutination for microbial antigens, microbial typing sera)		
B. Media		
C. Biochemicals		
D. Automated and non-automated commercial identification systems		
E. Antimicrobial susceptibility testing		
F. Refrigerators		
G. Incubators (aerobic, anaerobic, and CO <sub>2</sub> )		
H. Freezers		
I. Heating Block		
J. Water Bath		
K. Centrifuges		
L. Biological Safety Hood		

	PERFORMED	SIGNATURE
1. Identifies location of the Clinical Microbiology Procedure Manual		
2. Reviews protocol for the use of the Laboratory Information System. Demonstrates ability to enter, review and retrieve data.		
3. Reviews protocol for the collection and transport of clinical specimens		
4. Reviews protocol for rejection of specimens		
5. Reviews protocol for infection control in the laboratory		
6. Reviews protocol for processing and interpretation of:		
a. Blood culture specimens		
b. CSF specimens		
c. Body fluids other than CSF specimens		
d. Upper respiratory tract specimens		
e. Lower respiratory tract specimens		
f. Genital specimens		
g. Fecal specimens		
h. Urine specimens		
i. Wound specimens		
j. Tissue specimens		
k. Skin specimens		
l. Hair specimens		
m. Nail specimens		
7. Reviews protocol for the operation and/or use of automated and non-automated commercial microbial identification systems.		
8. Reviews protocol for the use of biochemical and serological tests in the identification of microbes.		
9. Reviews protocol for antimicrobial susceptibility testing		
10. Reviews protocol for febrile agglutinin test		
11. Reviews protocol for cold agglutinin test		
12. Reviews protocol for operation and maintenance of nephelometer		
13. Reviews protocol for operation and maintenance of ELISA/EIA plate reader		
14. Reviews protocol for operation and maintenance of fluorescent microscope		
COMMENTS:		



1 = None of the Time    2 = Some of the time    3 = Most of the time    4 = All of the time

MICROBIOLOGY TEST SKILLS	1	2	3	4	EVALUATOR SIGNATURE
1. Disposes of hazardous waste according to protocol					
2. Decontaminates work area and spills according to protocol					
3. Uses gloves appropriately					
4. Uses the Biological Safety Hood according to protocol					
5. Labels all media and biochemicals legibly and accurately					
6. Organizes workload appropriately					
7. Records and enters test results accurately and in a timely manner					
8. Uses all micropipettors appropriately					
9. Labels tubes/slides/plates legibly and accurately					
10. Prepares dilutions according to protocol					

1 = None of the Time    2 = Some of the time    3 = Most of the time    4 = All of the time

MICROBIOLOGY TEST SKILLS (CONT'D.)	1	2	3	4	EVALUATOR SIGNATURE
<b>Bacteriology - Minimum # of Procedures = 10</b>					
<u>Stains and Biochemicals:</u>					
1. Performs and interprets the Gram stain according to protocol					
2. Performs and interprets the catalase test according to protocol					
3. Performs and interprets the slide and tube coagulase test according to protocol					
4. Performs and interprets the oxidase test according to protocol					
5. Performs and interprets the wet mount according to protocol					
6. Performs and interprets the urease test according to protocol					
7. Performs and interprets the motility test according to protocol					
8. Performs and interprets the spore stain according to protocol					
9. Performs and interprets the Dnase test according to protocol					
<u>Serological:</u>					
1. Performs streptococcal grouping according to protocol					
2. Performs serotyping of <u>Salmonella</u> and <u>Shigella</u> according to protocol					
3. Performs serotyping of <u>Neisseria meningitidis</u> according to protocol					
4. Performs serotyping of <u>Haemophilus influenzae</u> according to protocol					
5. Performs bacterial antigen test					
6. Performs cryptococcal antigen test (usually performed in Bacteriology) according to protocol					
<u>Identification of the Principle Bacteria Encountered in Clinical Laboratory</u>					
Using identification protocol, including both automated and non-automated techniques, identify the following groups of bacteria:					
1. <u>Staphylococcus spp.</u>					
2. <u>Streptococcus spp.</u>					
3. Enterobacteriaceae					
4. Gram negative fermentating rods other than Enterobacteriaceae					
5. Non-fermenting Gram negative bacilli					
6. <u>Vibrionaceae</u>					
7. <u>Campylobacter spp.</u>					
8. MRSA					
9. VRE					
10. <u>Neisseria spp.</u>					
11. <u>Haemophilus spp.</u>					
12. <u>Gardnerella vaginalis</u>					
13. <u>Clostridium spp.</u>					
14. <u>Bacteroides spp.</u>					
15. <u>Prevotella spp.</u>					
16. <u>Porphyomonas spp.</u>					
17. <u>Fusobacterium spp.</u>					
18. <u>Peptococcus niger</u>					
19. <u>Peptostreptococcus spp.</u>					
20. M. tuberculosis & Mycobacteria other than M. tuberculosis					
<u>Antimicrobial Susceptibility Testing</u>					
1. Using the Bauer-Kirby disc diffusion technique, perform, read and interpret antimicrobial susceptibility tests on aerobic and facultative anaerobic bacteria commonly isolated in the clinical laboratory					
2. Performs, reads and interprets MICs on aerobic and facultative anaerobic bacteria commonly isolated in the clinical laboratory					

<b>Immunology/Serology - Minimum # of Procedures = 5</b>					
1. Performs test, including all appropriate quality control, according to protocol and correctly records and interprets the results for:					
a. non-treponemal antibody tests (e.g. RPR, VDRL)					
b. treponemal antibody tests (FTA-ABS, MHA-TP)					
c. heterophile antibodies (e.g. Mono-Diff, Mono-Spot, Mono-Test)					
d. antinuclear antibodies					
e. streptococcal antibodies					
f. rheumatoid factor					
g. C-reactive protein					
h. Lyme antibodies					
i. Viral antibodies/antigens:					
1. Epstein-Barr					
2. Cytomegalovirus					
3. Rubella					
4. Hepatitis A					
5. Hepatitis B					
6. Hepatitis C					
7. HIV-1					
COMMENTS:					



<b>AFFECTIVE SKILLS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>EVALUATOR SIGNATURE</b>
1. Arrives at the laboratory at the designated time					
2. Wears the required uniform					
3. Presents a neat and clean professional appearance					
4. Begins work promptly on arrival					
5. Completes all assigned work					
6. When confronted with an error, understands the error, repeats the test and avoids making the same error again.					
7. Makes optimum use of available time by seeking assignments, offering assistance to others and reading relevant instructional aids					
8. Accepts criticism without resentment and attempts to improve					
9. Is respectful of others' feelings					
10. Exhibits a genuine interest in clinical laboratory sciences					
11. Understands the concept of patient confidentiality					
COMMENTS:					

**NOTE: MID-ROTATION PERFORMANCE**

A mid-rotation performance evaluation has been included in order to allow the student to recognize and improve on laboratory tests before the student's rotation is finished. Please indicate below, and inform the student of any area he/she may need to improve.

LABORATORY TEST(S) NEEDING IMPROVEMENT: (Please indicate date of comment)

LABORATORY TEST(S) - PROGRESS REPORT: (Please indicate date of comment)

Signature of Person

Completing Form: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Student Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Micro clinical evaluation log blank.cln

Rev 2006