#### Laboratory Methods Approval Form

|  |  |
| --- | --- |
| **Trainee name:** |       |
| **Accredited setting:**  |       |
| **Supervisor(s):**  |       |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**GENERAL AIMS**

1. Provide a guiding framework for supervisors and trainees to achieve formal study requirements of laboratory aspects of sexual health medicine in Advanced Training.
2. Ensure relevant learning objectives in skills and knowledge relating to laboratory aspects within the Advanced Training Curriculum in Sexual Health Medicine are covered and met.
3. Align relevant learning objectives within the Advanced Training Curriculum in Sexual Health to other relevant RACP Advanced Training Program curricula, particularly:
* Clinical immunology and Allergy
* Infectious Diseases
* Public Health Medicine
1. Formalise the training framework for Laboratory attachments to ensure level of exposure, expertise, training and learning objectives are met by all trainees.
2. Provide a guiding framework for accreditation and comparison to equivalent formal study/experience.

**SUMMARY OF LEARNING OBJECTIVES**

1. To introduce trainees to a working diagnostic laboratory and its methods.
2. To provide hands on laboratory experience.
3. To provide insight into roles the laboratory provides in relation to sexual health and how test selection influences outcomes/decision making processes.
4. To gain laboratory skills in performing certain tests.
5. Exposure to newer technologies and their basis.
6. Gain knowledge in general laboratory concepts in order to provide a framework for future developments.
7. Understand how close ties with a laboratory can assist your clinical and public sexual health delivery.

**REQUIREMENTS**

**Supervisor:**

1. Ensure all learning objectives are signed and completed to satisfaction of supervisory staff in relevant laboratory(ies).

2. Liaise with Chapter and Laboratory to cover any deficits identified.

3. Supervise and sign off any laboratory aspects completed in clinic.

 **Trainee:**

1. Completion of learning objectives outlined to satisfaction of supervisory staff in relevant laboratory(ies).

2. Ensure workbook signed off by supervisor and all areas signed off and covered.

**Laboratory supervisor:**

1. Signing of learning objective workbook

2. Ensure all aspects covered and trainee has performed to expected standard.

3. Discuss any deficits with trainee and supervisor to ensure these can be remedied/covered elsewhere.

**Curriculum relating to Laboratory Methods**

**General public health concepts**

Be shown which organisms and diseases are laboratory notifiable to public health in your geographic area and the processes of notification/data collection/reference lab referral used including use of public health and other resources.

For example, NSW HIV Support Program for HIV diagnoses by doctors inexperienced in HIV management.

**Theme 1:** Principles of Infectious Diseases in Sexual Health

Learning objectives:

**1.1** Apply basic principles of microbiology to the clinical diagnosis, treatment and monitoring of infections within the discipline of sexual health medicine

**1.2** Evaluate infection in terms of host susceptibility and adjust clinical response accordingly

**1.3**  Apply epidemiology, clinical spectrum of disease, diagnostic methods, and antimicrobial therapy for specific pathogenic micro-organisms to patient management.

**Theme 2:** HIV

Learning objectives:

**2.1** Assess and manage HIV infection

**2.2** Assess and manage patients with TB

**2.3**  Assess and manage patients with hepatitis B

**2.4** Assess and manage patients with hepatitis C

**2.5** Perform and interpret diagnostic tests for HIV infection, including discordant results, indeterminate results, testing during suspected seroconversion illness, and rapid HIV Testing

**2.6** Interpret and apply genetic tests for abacavir hypersensitivity to clinical practice

**2.7** Observe and interpret T-cell lymphocyte subset testing, viral load and resistance assays, and know how to modifying management according to these results

**Theme 3:** Diagnostic Services in the Management of Sexually Transmitted Infections

Learning objectives:

**3.1** Describe basic laboratory procedures, including

* lab safety
* hygiene and asepsis, principles of sterilisation
* use and maintenance of microscope
* preparation and quality control of solid media
* essential contents of important common and selective media and how to access information for others
* use of biohazard cabinets
* use of centrifuges
* specimen collection and transport

**3.2** Microscopy

* + Identifying good and bad specimens
	+ Gram staining of anogenital specimens
	+ Wet prep of vaginal specimens
	+ Demonstration of Immunofluorescence and immune-histochemical staining
	+ Demonstration of Acid-fast staining|

**3.3** Colony morphology, physiology and growth requirements and limitations and benefits related to non-culture methods

**3.4**  Describe culture conditions for STI pathogens – aerobic/anaerobic/CO2

**3.5** Examples of automated systems for identifying bacteria and principles of identification

**3.6**  Describe basic methodology, advantages and limitations of nucleic acid amplification tests (NAATs)

**3.7**  Describe different methods of antimicrobial susceptibility

* + MIC by disc diffusion/ E-test/agar dilution
	+ automated methods (including MALDI-TOF)
	+ molecular methods, including gonococcal DNA sequencing

**3.8** Describe principles of antigen detection

* + Particle and latex agglutination (for example, Cryptococci antigen testing)
	+ Immunofluorescence (for example, HSV/Treponema pallidum)

**3.9** Describe principles of antibody detection methods

* + EIA
	+ IF including FTA serological tests for syphilis
	+ Treponemal TPPA/TPHA tests
	+ Non-treponemal tests (VDRL/RPR)
	+ CF test
	+ Western Blot/Immunoblot assays
	+ Rapid tests (syphilis)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SUPERVISOR DECLARATION**

Please tick to indicate that you agree with the following.

[ ]  I declare that the trainee has met all requirements of the curriculum related to Laboratory Methods.

Please provide any additional feedback on your trainee’s workbook:

|  |
| --- |
|       |
| Supervisor’s signature:  | Date:       |
| Trainee’s signature: | Date:       |

Send the completed form to the Training Committee in Sexual Health Medicine at shmedtraining@racp.edu.au