



UNIVERSITY OF ALBERTA

Ray Rajotte Surgical - Medical Research Institute

This is to certify that

Monique Alves de Almeida Carneiro

has successfully completed the UAPWC
Institutional Animal User Training Program - Part II
Workshop on

Aseptic Techniques in Surgery

December 12, 2019

A handwritten signature in black ink, appearing to be "D. Dixon".

*D. Dixon, Instructor
Technologist
Ray Rajotte Surgical Medical Research Institute*

Aseptic Techniques in Surgery

RECORD OF TRAINING

STUDENT NAME: Monique Alves de Almeida Carneiro

*This certificate is provided to the registrant as documentation of participation in the University of Alberta's Institutional Animal User Training Program Part II course on **Aseptic Techniques in Surgery** at the Ray Rajotte Surgical - Medical Research Institute. The one-day course is composed of both classroom and practical hands-on components of aseptic technique used in a variety of species. Participants must satisfactorily complete all components at a beginner level. This course is considered only an introduction to the concepts and the techniques necessary to prepare equipment and animals for surgery.*

CLASSROOM AND WET LAB COMPONENTS of COURSE

1. Brief discussion of CCAC guidelines, and Alberta laws and regulations regarding surgery in animal research
2. Preparation of scrub area and operating room
 - a. Discussion and tour of OR including entry and exit procedures, setup of room, cleanliness, layout of equipment, supplies, lighting, personnel assistance
3. Instrument sterilization methods: participants practice complete pack preparation and wrapping
4. Presurgical animal preparation prior to beginning aseptic preparation
5. Aseptic Patient Preparation:
 - Instruction and practice performing an aseptic preparation of a surgical site on a model animal, including hair removal/shave, aseptic scrub and draping with assessment of sterile technique using GloGerm
6. Surgeon Preparation – surgeon scrub, gowning and gloving:
 - Proper sequencing of surgeon preparation
 - Instruction and practice donning sterile surgical attire including mask, cap, booties, gown and gloves by closed and open gloving techniques, with assessment of sterile technique using GloGerm
7. Instruction and practice sterile field establishment and maintenance during draping and instrument placement



INSTRUCTOR SIGNATURE(Deb Dixon)

December 12, 2019

DATE

06/2013



Health Sciences Laboratory Animal Services

This is to certify that

Monique Marilyn

*has successfully completed Part II Protocol Required training in
the Mouse*

Mouse Isoflurane Anesthesia

Jan. 29th, 2021

Shirley Armstrong

*Course Instructor
Health Sciences Lab Animal Services
University of Alberta*



Health Sciences Laboratory Animal Services

This is to certify that

Monique Marylin Alves De Almeida

has successfully completed the

Part 2 Species Required Training In The Mouse

May 29, 2020

A handwritten signature in blue ink, appearing to read "Janece Beth McGee".

Course Instructor

Health Sciences Lab Animal Services University of Alberta

Syllabus and Competency Record

- Module and Wet Lab Components
- Module and lab will cover:
- Basic biology,
 - Husbandry,
 - Handling/restraint,
 - Euthanasia, (CO₂ in lab),
 - Zoonosis
 - And human safety regarding use of the mouse model in research.

Wet Lab Components

Handling and Sexing

- Complete a health assessment and physical examination on the mouse.
- Identify and review stress / abnormal behavior / pain assessment in this species.
- Must be able to identify sex of the animals, demonstrate humane handling and restraint of the species.

Euthanasia

- CO₂ euthanasia completed,
- Other acceptable methods will be discussed.
- Student must be able to confirm death has occurred.

For more information regarding this program, please contact the HSLAS Training Coordinator at (780) 492-9138

Retain this record as proof of training



University Animal Policy and Welfare Committee

This is to certify that

Monique Marylin Alves de Almeida Carneiro

has successfully completed the online Part I Course
to meet the CCAC Mandatory Training Requirements for Animal Users

Core 1: Animal Research: Ethics and Use at the University of Alberta

Core 2: Basic Principles of Animal Ethics and Welfare of Animal Use

Stream(s): Laboratory Animals in Vivaria

A handwritten signature in black ink, appearing to read "C. Wilkinson".

*Dr. Craig W. Wilkinson, BSc, DVM
University Veterinarian
Research Ethics Office*

December 3, 2019



**AALAS
LEARNINGLIBRARY**

This certifies that on

10-18-2020

Monique Marylin Alves de Almeida Carneiro

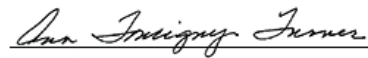
of University of Alberta

Completed the course and passed the examination for

Aseptic Technique for Rodent Survival Surgery

and earned 1.5 CEU(s) on the AALAS LearningLibrary

Exam ID: 5618300



Ann Turner, PhD, FASAE, CAE
Executive Director, AALAS



This certifies that on

10-19-2020

Monique Marylin Alves de Almeida Carneiro

of University of Alberta

Completed the course and passed the examination for

**Post-Procedure Care of Mice and Rats in Research:
Minimizing Pain and Distress**

and earned 1 CEU(s) on the AALAS LearningLibrary

Exam ID: 5619247



A handwritten signature in black ink that reads "Ann Turner".

Ann Turner, PhD, FASAE, CAE
Executive Director, AALAS



**AALAS
LEARNINGLIBRARY**

This certifies that on

10-19-2020

Monique Marylin Alves de Almeida Carneiro

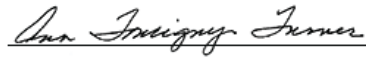
of University of Alberta

Completed the course and passed the examination for

Pain Management in Laboratory Animals

and earned 1 CEU(s) on the AALAS LearningLibrary

Exam ID: 5619058



Ann Turner, PhD, FASAE, CAE
Executive Director, AALAS



Health Sciences Laboratory Animal Services

This is to certify that

Monique Marilyn Alves de Almeida Carneiro

has successfully completed Part II Protocol Required training in the mouse

Intraperitoneal & Subcutaneous Injections

Nov. 3, 2020

A handwritten signature in blue ink, appearing to read "Colin Meyer", written over a horizontal line.

Course Instructor
Health Sciences Lab Animal Services
University of Alberta

Syllabus Including Relevant SOP's

Mouse Intraperitoneal Injection

A minimum of 3 successful injections in a row required to pass

- The mouse was adequately restrained; head down on its back.
- Observed student identifying proper landmarks prior to needle insertion with beveled edge facing up.
- The student then inserted the needle into the caudal abdomen; aspirated prior to injection to check for placement.
- The student successfully administered the injection of sterile NaCl.

Mouse Subcutaneous Injection

A minimum of 3 successful injections in a row required to pass

- The mouse was adequately restrained as per the SOP restraint method
- Observed student identifying proper landmarks prior to needle insertion with beveled edge facing up.
- The student then inserted the needle into the subcutaneous space; successfully administering the sterile NaCl.

SOP's

Mouse Restraint

Mouse SQ, IP and IM injection

For more information regarding this program, please contact the training coordinator at (780) 492-5138.

Retain this record as proof of training.



Ray Rajotte

Surgical-Medical Research Institute

This is to certify that

Monique Alves De Almeida Carneiro
has successfully completed the UAPWC
Institutional Animal User Training Program
Part II Workshop on
Introduction to Basic Surgical
Techniques in Research

October 21, 2020

Craig W. Wilkinson, BSc, DVM
University Veterinarian, Research Ethics Office

A handwritten signature in black ink, appearing to read "C. Wilkinson".


Introduction to Basic Surgical Techniques in Research
RECORD OF TRAINING

STUDENT NAME: Monique Marilyn Alves de Almeida Carneiro

*This certificate is provided to the registrant as documentation of participation in the University of Alberta's Institutional Animal User Training Program Part II course **Introduction to Basic Surgical Techniques in Research** at the Surgical Medical Research Institute. The one-day course is composed of both classroom and practical hands-on components necessary for surgery in a variety of species. Participants must satisfactorily complete all components at a beginner level. This course is considered only an introduction to the concepts and the techniques necessary to begin to assist in a surgical suite in a research setting and begin more advanced surgical training to perform specific procedures under an experienced, qualified supervisor.*

CLASSROOM and WET LAB COMPONENTS of COURSE

1. Brief discussion of CCAC guidelines, and Alberta laws and regulations regarding surgery in animal research
2. Presurgical animal conditioning and preparation
3. Introduction to tissue handling, wound healing, and prevention of complications
4. Introduction to suture material types and suture selection criteria
5. Introduction to surgical instrumentation:
 - Participants practice instrument identification, proper use and handling of commonly used instruments
6. Introduction to basic suturing and knot-tying techniques:
 - Participants learn and practice simple interrupted stitch with surgeon's knot and are introduced to other basic suture patterns
7. Introduction to common postoperative recovery, care and housing considerations


INSTRUCTOR SIGNATURE
Craig W. Wilkinson, BSc, DVM.
University Veterinarian, Research Ethics Office

October 21, 2020