

# WORKSHOP

# ADVANCING WILDLIFE CONSERVATION

# THROUGH MOLECULAR DIAGNOSTICS

JULY 29

8:30H

## OPENNING

LILIAN SILVA CATENACCI, DVM, PHD (PPGTAIR/UFPI, CIATEN, SAINT LOUIS ZOO)

9:00H

## LECTURE:

Good lab practices, molecular basics overview, workflow, sampling and extraction, quantification

KATHLEEN APAKUPAKUL, MS, MA (SAINT LOUIS ZOO)

10:45H

## COFFE BREAK

11:00H

## RESEARCH TALK

One Health and history of ICM

SHARON L. DEEM, DVM, PHD, DACZM (SAINT LOUIS ZOO AND UNIVERSITY OF MISSOURI-SAINT LOUIS)

11:30H

## DISEASE PRESENTATION

Emerging noninfectious diseases of Chelonians

SHARON L. DEEM, DVM, PHD, DACZM (SAINT LOUIS ZOO AND UNIVERSITY OF MISSOURI-SAINT LOUIS)

12:00H

## LUNCH

KATHLEEN APAKUPAKUL, MS, MA (SAINT LOUIS ZOO)

14:00H

## WET LAB

Fundamentals of DNA Extraction and Molecular Analysis

KATHLEEN APAKUPAKUL, MS, MA (SAINT LOUIS ZOO)

### Organização:



### Apoio:

# WORKSHOP

# ADVANCING WILDLIFE CONSERVATION

# THROUGH MOLECULAR DIAGNOSTICS

**JULY 30**

9:00H

## LECTURE:

PCR basics + strategies, endpoint PCR, degenerate primers, gel electrophoresis

KATHLEEN APAKUPAKUL, MS, MA (SAINT LOUIS ZOO)

10:45H

COFFE BREAK

11:00H

## RESEARCH TALK

OH projects in Brazil in partnership with ICM

OSMAIKON LISBOA LOBATO, MS, (UNIVERSIDADE FEDERAL DO PIAUÍ)

11:30H

## DISEASE PRESENTATION

Overview of pathogens affecting chelonians

SHARON L. DEEM, DVM, PHD, DACZM (SAINT LOUIS ZOO AND UNIVERSITY OF MISSOURI-SAINT LOUIS)

12:00H

LUNCH

14:00H

## WET LAB

Gel excision of putative positive, PCR purification, sample quantification on Qubit

KATHLEEN APAKUPAKUL, MS, MA (SAINT LOUIS ZOO)

### Organização:



### Apoio:



# WORKSHOP

# ADVANCING WILDLIFE CONSERVATION

# THROUGH MOLECULAR DIAGNOSTICS

JULY 31

9:00H

## LECTURE:

Sanger + NGS sequencing, qPCR basics

KATHLEEN APAKUPAKUL, MS, MA (SAINT LOUIS ZOO)

10:45H

COFFE BREAK

11:00H

## RESEARCH TALK

Tortoise Conservation: From the Galapagos Islands to Madagascar

SHARON L. DEEM, DVM, PHD, DACZM (SAINT LOUIS ZOO AND UNIVERSITY OF MISSOURI-ST. LOUIS)

11:30H

## DISEASE PRESENTATION

Wildlife trafficking in Brazil and One Health

LILIAN SILVA CATENACCI, DVM, PHD (PPGTAIR/UFPI, CIATEN, SAINT LOUIS ZOO)

12:00H

LUNCH

14:00H

## WET LAB

qPCR with Biomeme and Step One

KATHLEEN APAKUPAKUL, MS, MA (SAINT LOUIS ZOO)

### Organização:



### Apoio:



# WORKSHOP

# ADVANCING WILDLIFE CONSERVATION

# THROUGH MOLECULAR DIAGNOSTICS

AUGUST 1

9:00H

## LECTURE:

Review results of qPCR of yesterday and Next-Level Genomics: Real-Time Sequencing with Oxford Nanopore

KATHLEEN APAKUPAKUL, MS, MA (SAINT LOUIS ZOO)

GABRIEL FERREIRA, PHD (LAVAL UNIVERSITY, CANADA/ CIATEN)

10:45H

COFFE BREAK

11:00H

## RESEARCH TALK

Next-Level Genomics: Real-Time Sequencing with Oxford Nanopore.

GABRIEL FERREIRA, PHD (LAVAL UNIVERSITY, CANADA/ CIATEN)

12:00H

LUNCH

14:00H

## WET LAB

Practical bioinformatics activities

VLADIMIR COSTA E SILVA, PHD (FIOCRUZ- PI)

## Organização:



## Apoio:



# WORKSHOP

# ADVANCING WILDLIFE CONSERVATION

# THROUGH MOLECULAR DIAGNOSTICS

AUGUST 2

9:00H

## LECTURE:

Scientific evidence maps

BRUNO GUEDES ALCOFORADO AGUIAR, PHD (UFPI AND CIATEN)

9:30H

COFFE BREAK

9:45H

## WET LAB

Animal health case studies

SHARON L. DEEM, DVM, PHD, DACZM (SAINT LOUIS ZOO AND UNIVERSITY OF MISSOURI-ST. LOUIS)

12:00H

## CLOSING REMARCKS

LILIAN SILVA CATENACCI, DVM, PHD (PPGTAIR/UFPI, CIATEN, SAINT LOUIS ZOO)

### Organização:



### Apoio:

