

INTRODUCING PEGASO EVOLUTION

CLINICAL DIAGNOSTICS AND APPLICATIONS



MEDICAL IMAGING

PEGASO EVOLUTION

THE COMPANY

ABOUT US

Quality Made in Italy

Designed and produced in Florence

Every need of the customer is satisfied in the same place

Research and Development group

A group of young engineers opened to the market request in order to satisfy them.

Ten years of expertise

Our team has developed a 10 years of expertise on HDVI technology.

From vet market to human

Our Company was born as a veterinarian supplier. Our products are thought for vets needs.



WHAT WE DO



Compact, Transportable and Lightweight

Our machine *drastically reduces* installation and operating costs, additionally it can also be *easily moved* around the clinic.

WHAT WE DO

We develop innovative scanners for veterinary radiology, conceived as CT + Fluoroscopy. Our machines are entirely designed and manufactured in Florence.

OUR VISION

Imaginalis pursues diagnostics that respects people and the environment. The patient is always the center of the medical service.

PEGASO EVOLUTION

THE MACHINE

PEGASO EVOLUTION



DESIGNED FOR
EQUIDAE



LIGHTWEIGHT &
TRANSPORTABLE



HIGH
RESOLUTION



LOW
RADIATIONS



LOW
CONSUMPTION



LIFTABLE
WITH LIFTER



PEGASO EVOLUTION



Height	209 cm
Length	232 cm
Width	217 cm
Gantry Diameter	222 cm

Internal cameras

Allow the micro correction of movement, ensuring precise images.

Mobile Console

With dual screen and user friendly interface.

Gantry

Inner diameter of 123 cm. Tilts up to 10° to facilitate use.

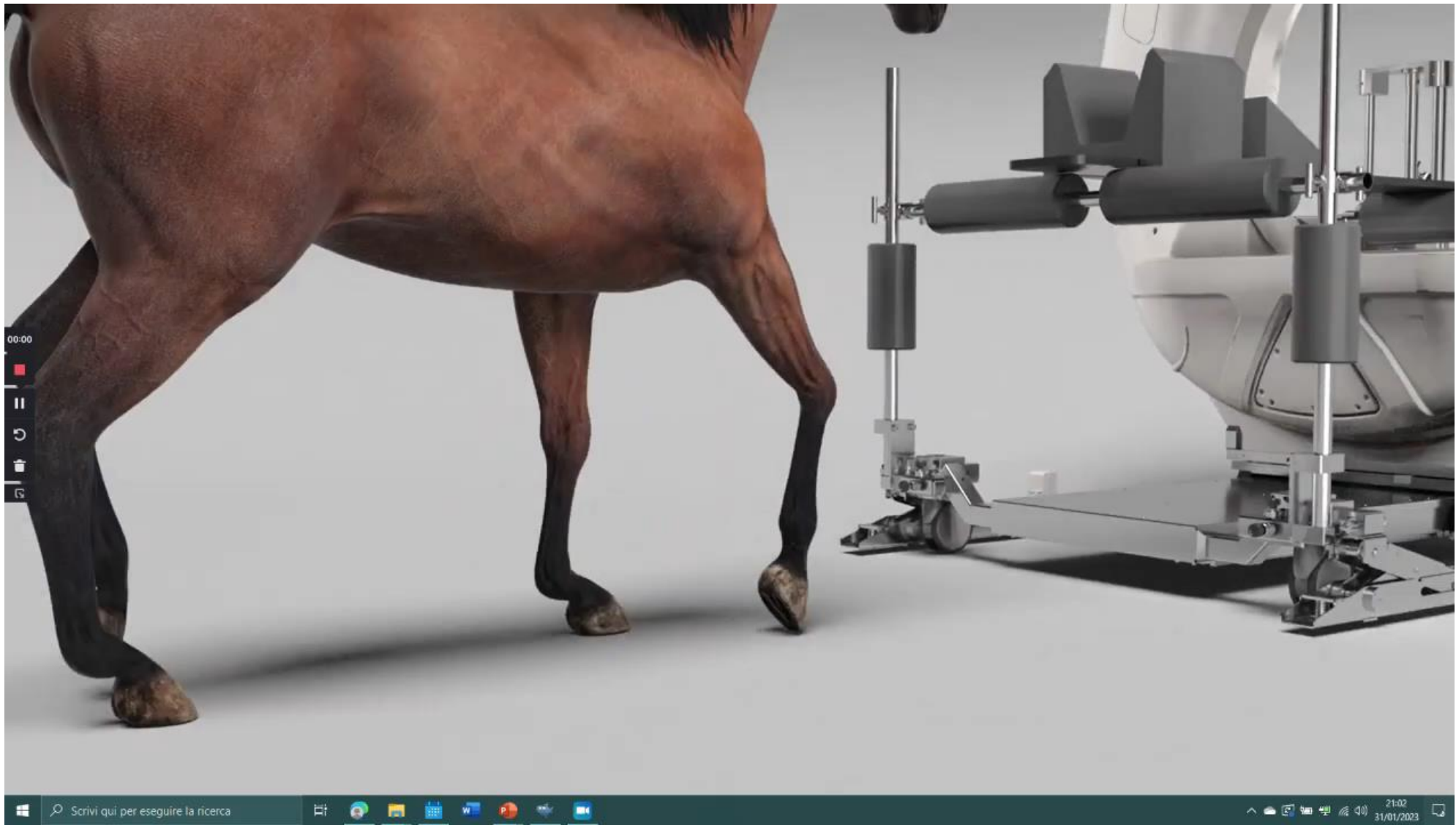
Wheels and Platform

Facilitate handling and installation.



Standing Scan

The *head*, *neck* and *limbs* of the equine can be scanned with the *sedated* patient *standing*, limiting the risks related to anaesthesia.

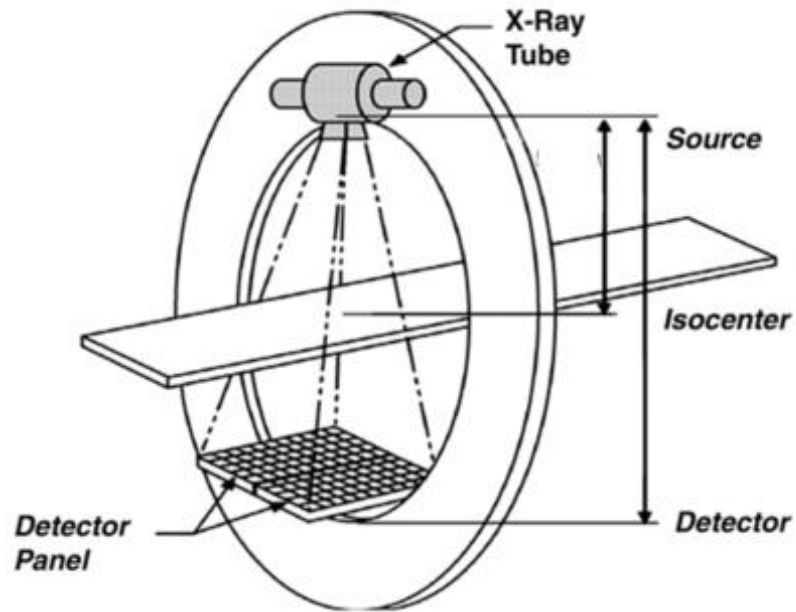


PEGASO EVOLUTION

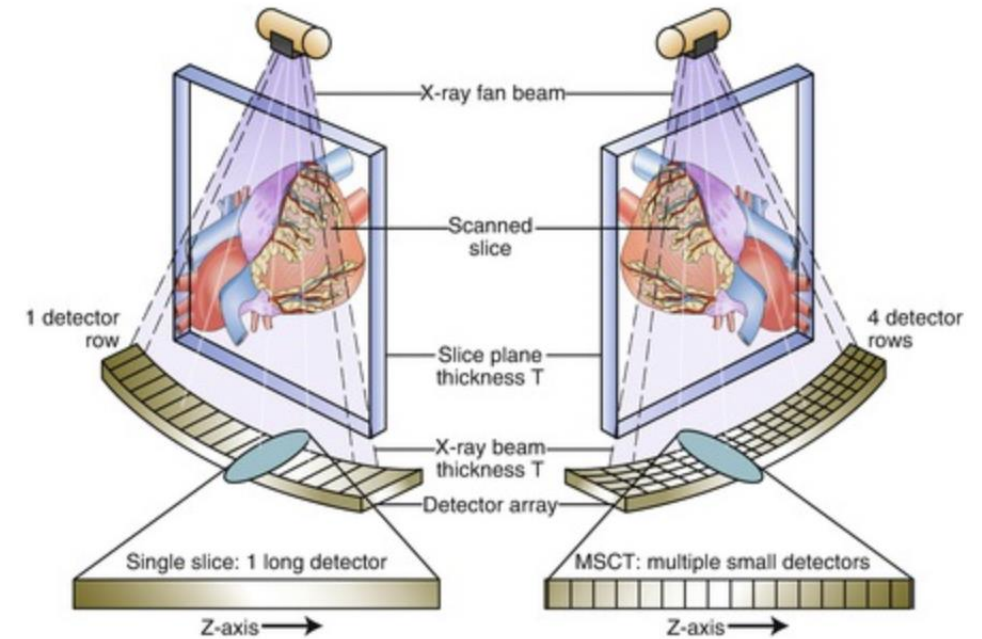
THE **HDVI TECHNOLOGY** IS
DIFFERENT

WHY HDVI-CT IMAGING PLATFORMS ARE DIFFERENT

HDVI CT TECHNOLOGY



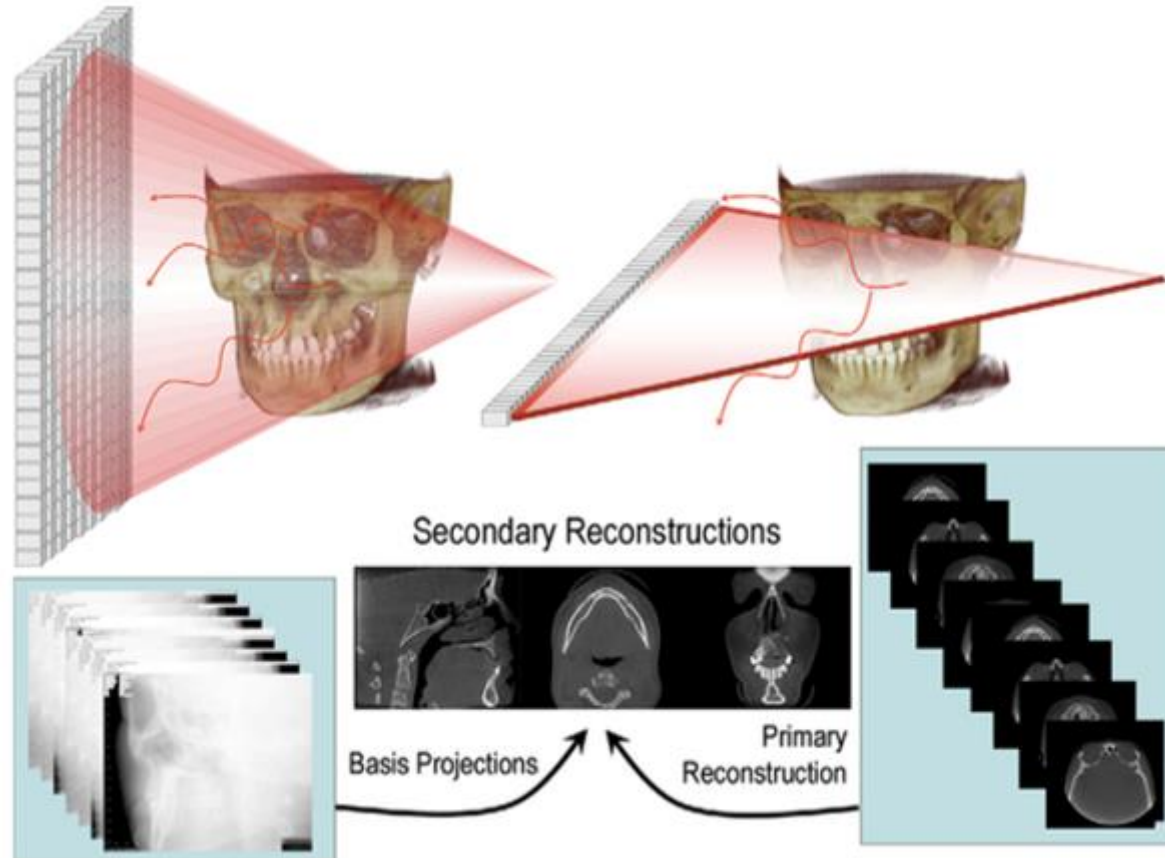
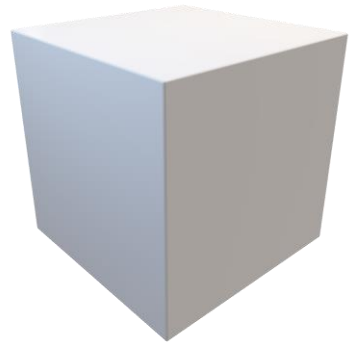
SLICE CT TECHNOLOGY



WHY HDVI-CT IMAGING PLATFORMS ARE DIFFERENT

HDVI TECHNOLOGY

SLICE CT TECHNOLOGY

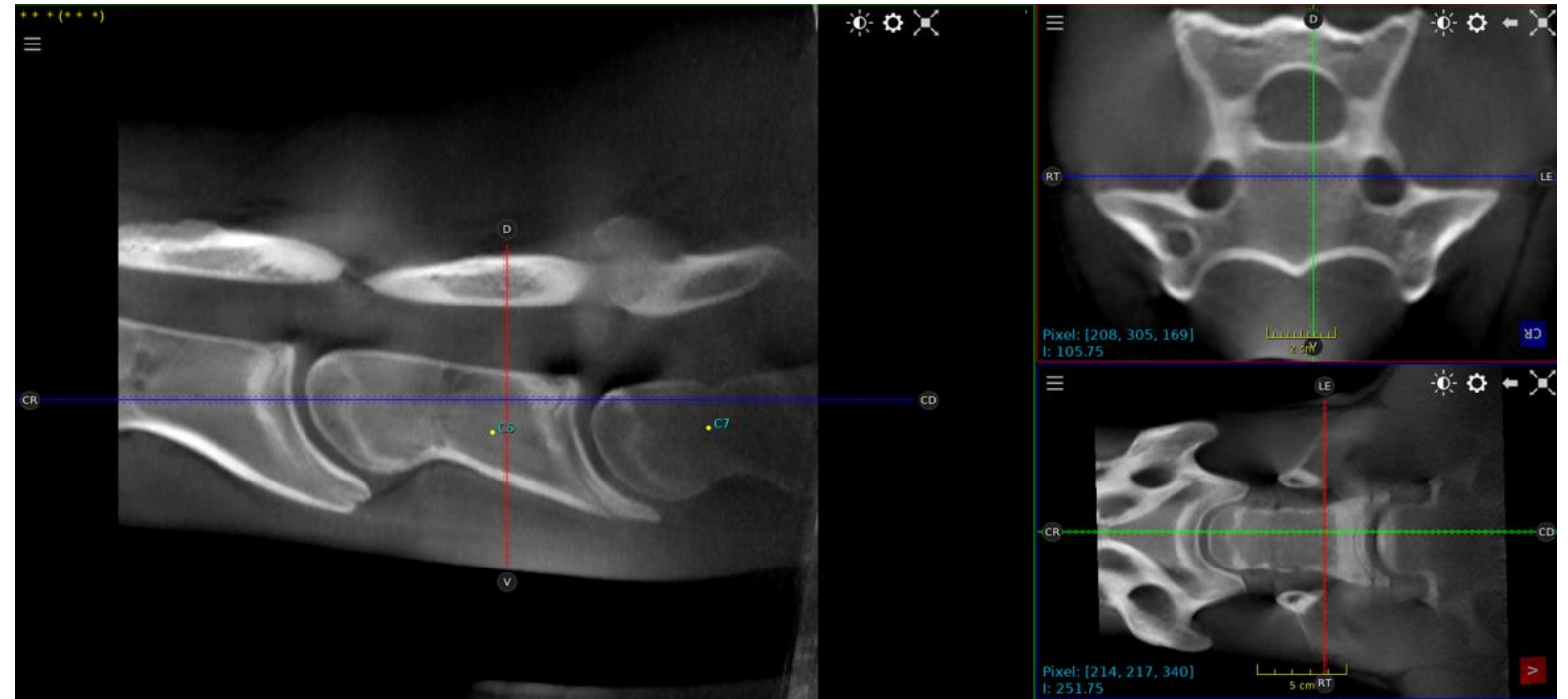


- Cylindrical detectors:
- Multiple dataset
 - limited resolution

HIGH-DEFINITION VOLUMETRIC IMAGING - ISOTROPIC VOXEL

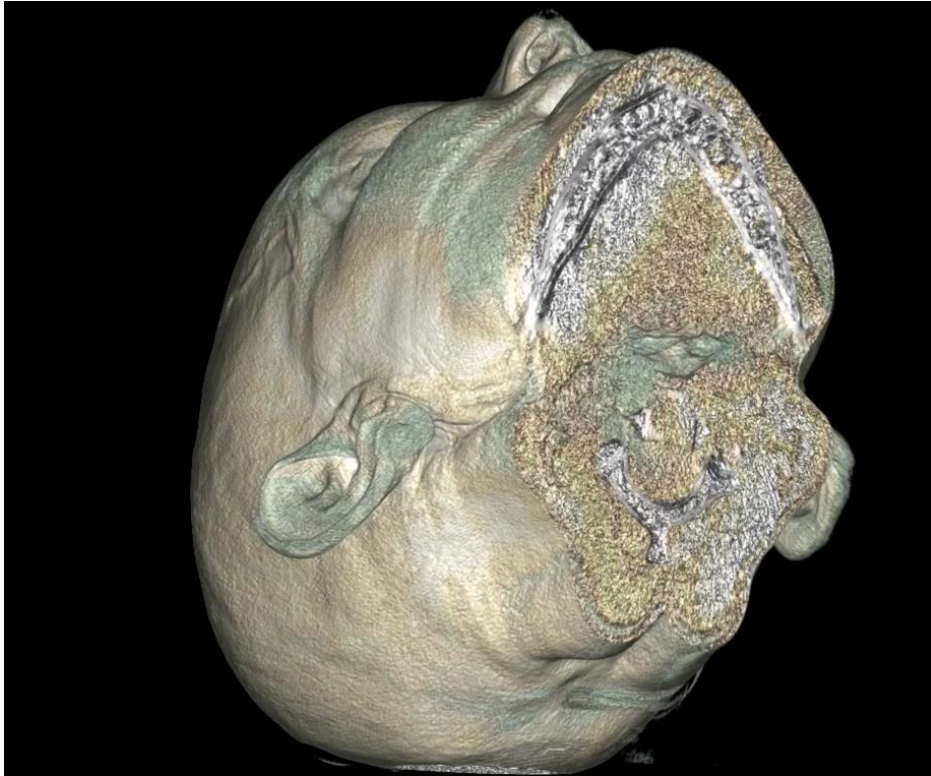
3D MAP OF DENSITIES IN A PATIENT

- Isotropic Voxels (*same resolution in all directions*: axial, sagittal and coronal).
- Can be viewed at any thickness and any orientation.
- Bone and soft tissue.
- Highest resolution in clinical imaging (up to 250 μm).



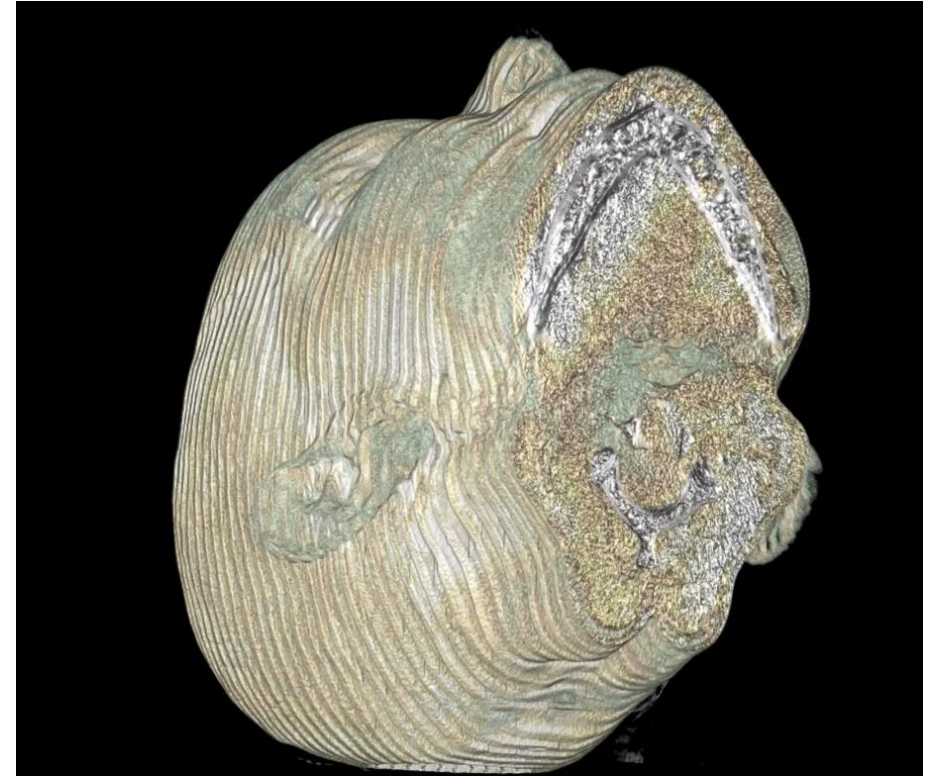
THE PRINCIPAL DIFFERENCE IS IN THE COLLECTED DATA

PEGASO'S HDVI-CT



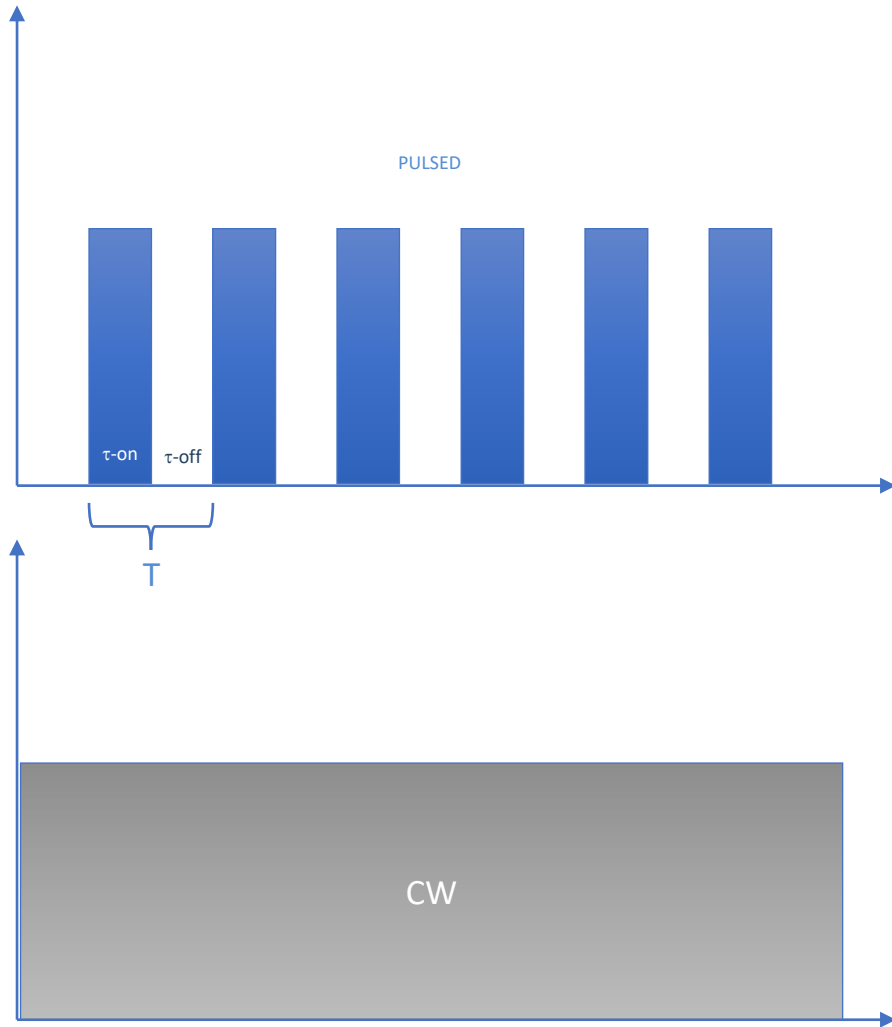
- *Gapless, Volumetric Data with No Interpolation*
- *One isotropic dataset at the highest resolution*
- *Primary imaging utility for all clinical cases*

CONVENTIONAL CT SYSTEMS



- *Data Gaps require Interpolation*
- *Multiple datasets- limited resolution*
- *Limited imaging utility*

WHY IS HDVI RADIATION SO MUCH LOWER?



WHY OUR RADIATION IS LOWER?

1) HDVI CT's radiation is **Pulsed** while multi-slice conventional CT's radiation is Continuous (CW)

HDCT Pulsed @ 1 – 2% Duty Cycle

$$\text{Duty Cycle}[\%] = \frac{t\text{-on}}{T}$$

HDCT radiation is 50% less than CW emitting beam ray.

2) **Beam Filtration**

3) **Lower Dose Techniques** – more sensitive detection

WHY PEGASO **HDVI-CT** IMAGING PLATFORMS IS DIFFERENT?

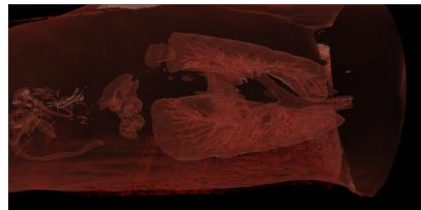
- 2 in 1 multimodality platform: CT – FL.
- Diagnostic + Intra-procedural (against only diagnostic conventional CT).
- Mobility (can be moved through the clinic doors) or can be used as a fixed platform in imaging space (against fixed conventional CT).
- Soft & Hard tissue (diagnostic).
- Higher Image Resolution (up to 250 μm against 1mm of conventional CT).
- Isotropic geometric voxels without interpolation, 100% real data (against interpolation of conventional CT).
- Lower Radiation compared to conventional CT (because of the pulsed emission).
- Lower cost of maintenance compared to conventional CT (1 third of electricity expenses).
- Less infrastructure build-out compared to conventional CT (just a 380V socket).
- Gantry with inner diameter of 123 cm (a big diameter for many different species)
- Tilts up to 110° to facilitate use
- Camera system allows the micro correction of the movement of the sedated horse, ensuring precise images

WHY HDVI-CT IMAGING PLATFORMS ARE DIFFERENT?

PEGASO EVOLUTION
2 modalities in one machine



Fluor o s c o p y



C T S c a n n e r



P o r t a b l e o r F i x e d

M o v e s e a s i l y t h r o u g h s t a n d a r d s i z e d
d o o r s a n d h a l l w a y s .

PEGASO EVOLUTION DIAGNOSTIC REALM

PEGASO'S VOLUMETRIC IMAGING PLATFORM:
AN OPTIMIZED SINGLE PLATFORM THAT SCAN HEAD, NECK
AND LIMBS IN THE STANDING HORSE.

DIAGNOSTIC (HDVI CT + FL) and INTRA-PROCEDURAL

Including but not limited to:

- ✓ Dentistry
- ✓ Ears, Nasal & Sinus
- ✓ Joints
- ✓ Neck, Spine
- ✓ Orthopedics



ISOVOLUMETRIC VOXEL ALLOWS TO SEE ALL DIFFERENT VIEWS



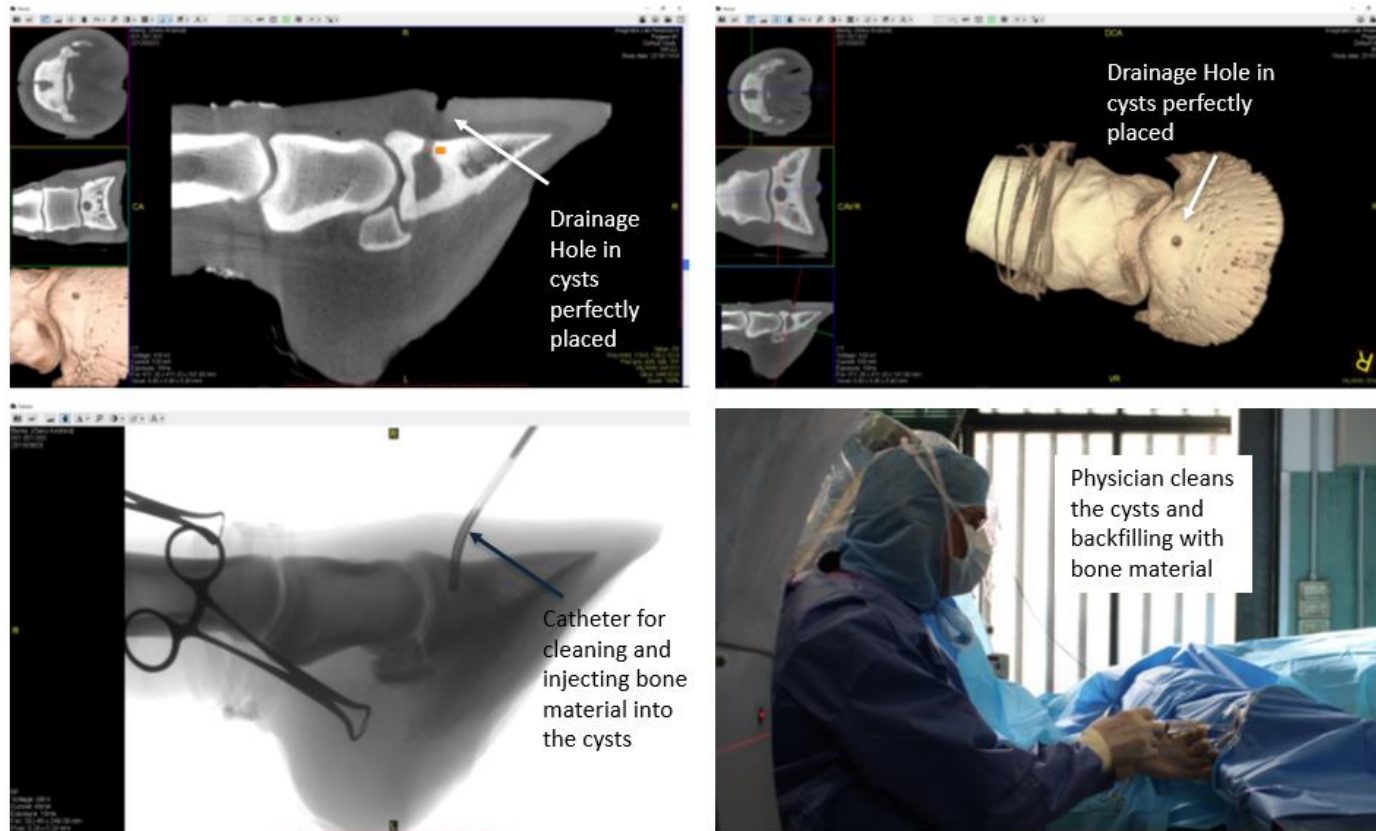
PEGASO EVOLUTION INTRASURGICAL REALM



FULL FEATURED FLUOROSCOPY MODALITY

INTERVENTIONAL RADIOLOGY

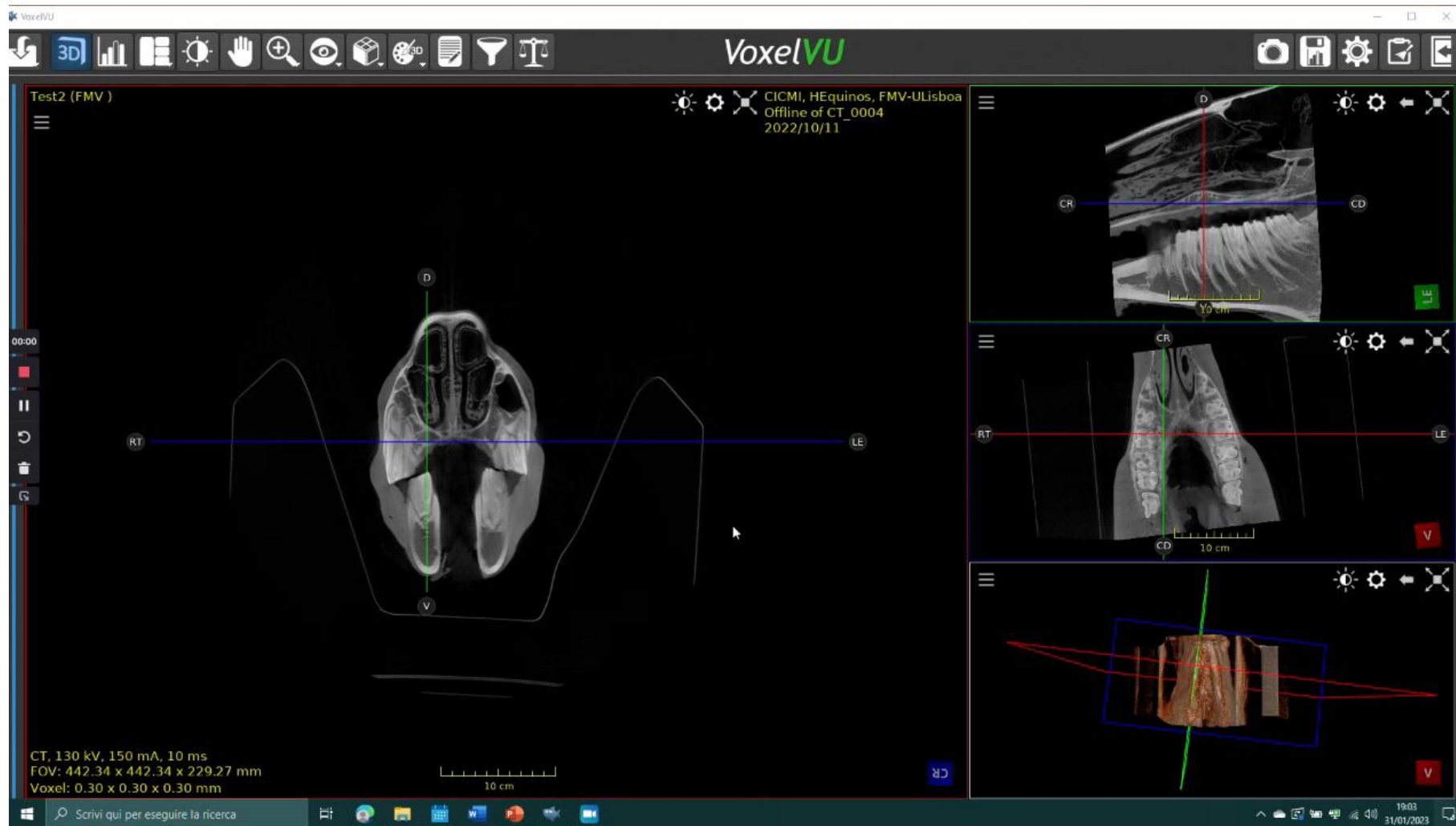
Follow live procedures



PEGASO EVOLUTION

THE CLINICAL CASES

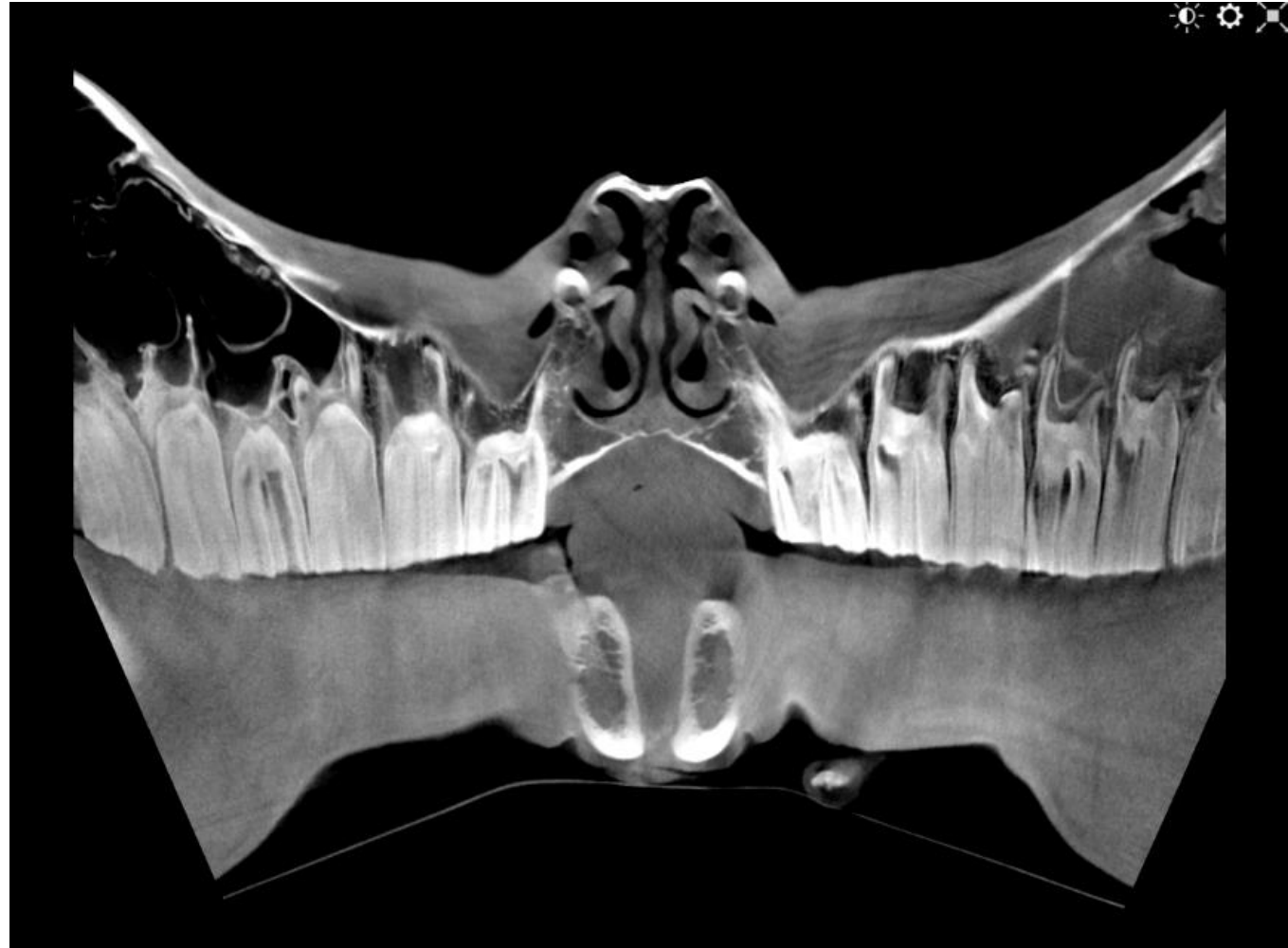
ISOVOLUMETRIC VOXEL ALLOWS TO SEE ALL DIFFERENT VIEWS



ISOVOLUMETRIC VOXEL ALLOWS TO SEE ALL DIFFERENT VIEWS



TEETH – STANDING HORSE



TEETH – STANDING HORSE



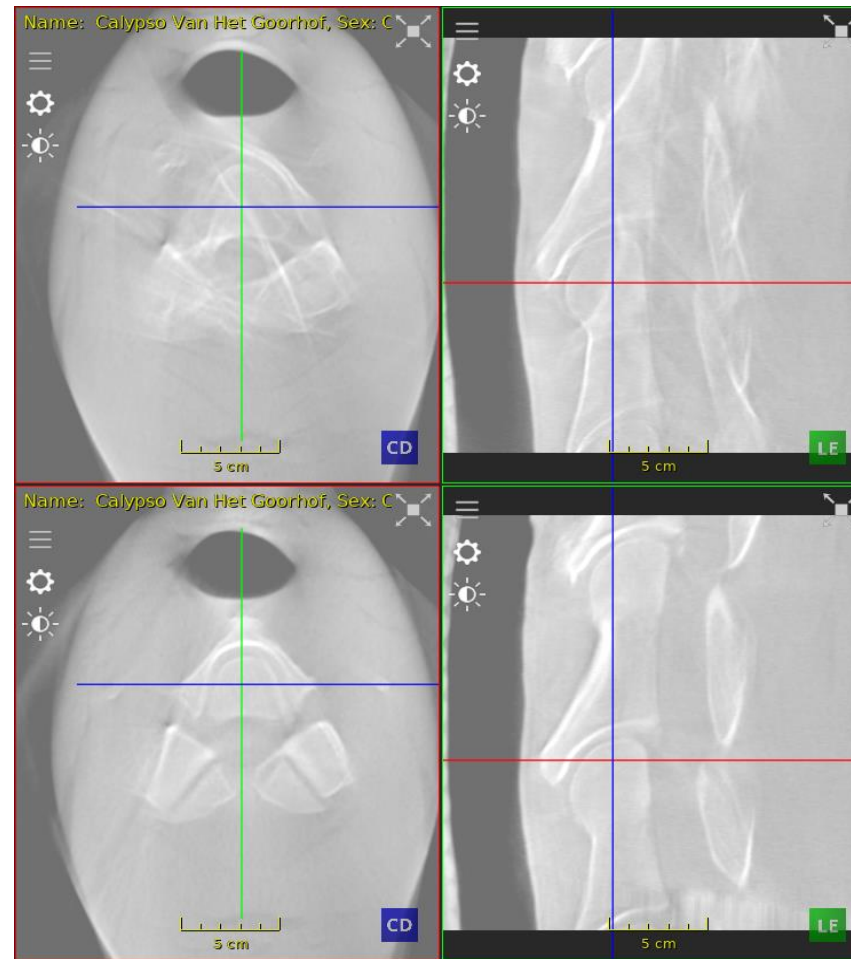
Courtesy of Dr. Toniato

NECK – STANDING HORSE



Courtesy of Dr. Lamas Luis

PEGASO EVOLUTION MOTION CORRECTION

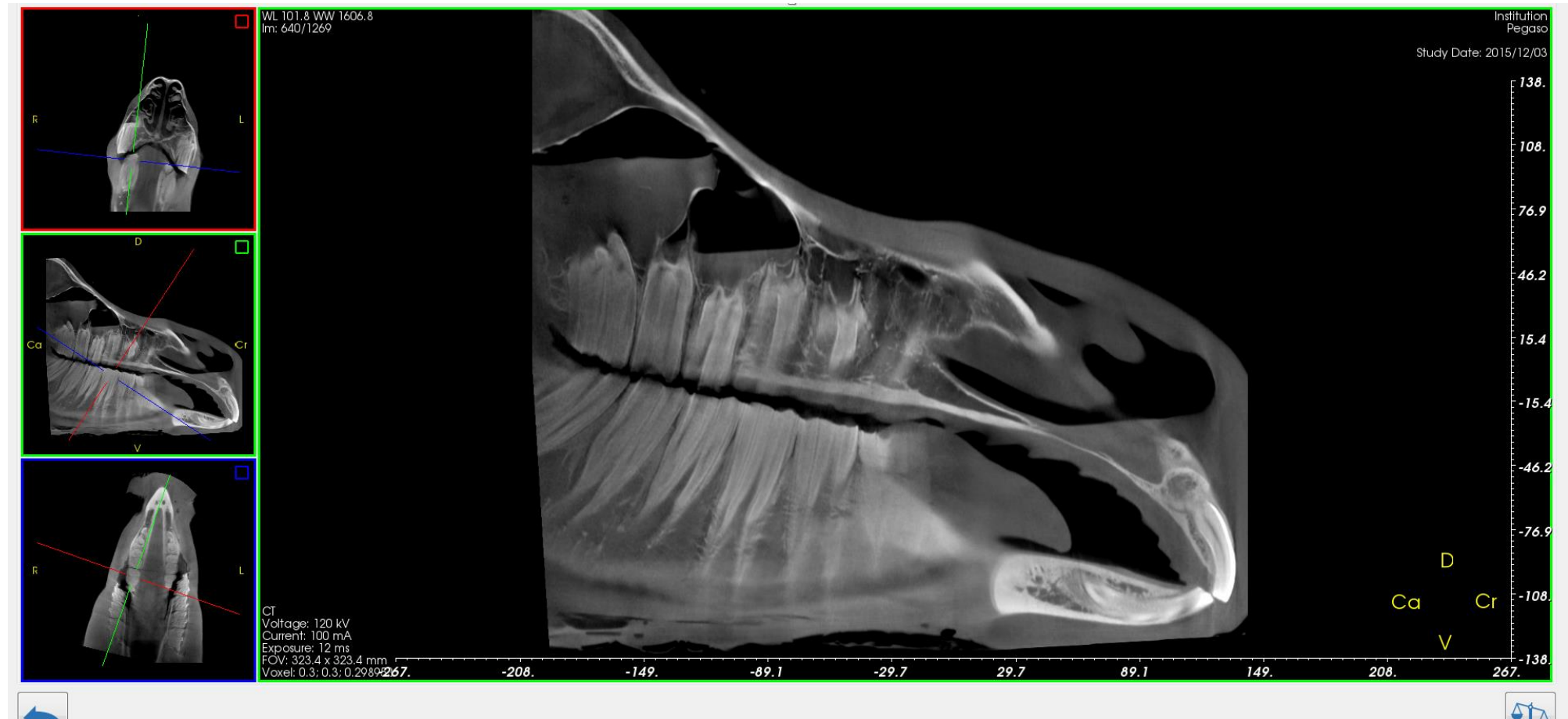


NECK – STANDING HORSE



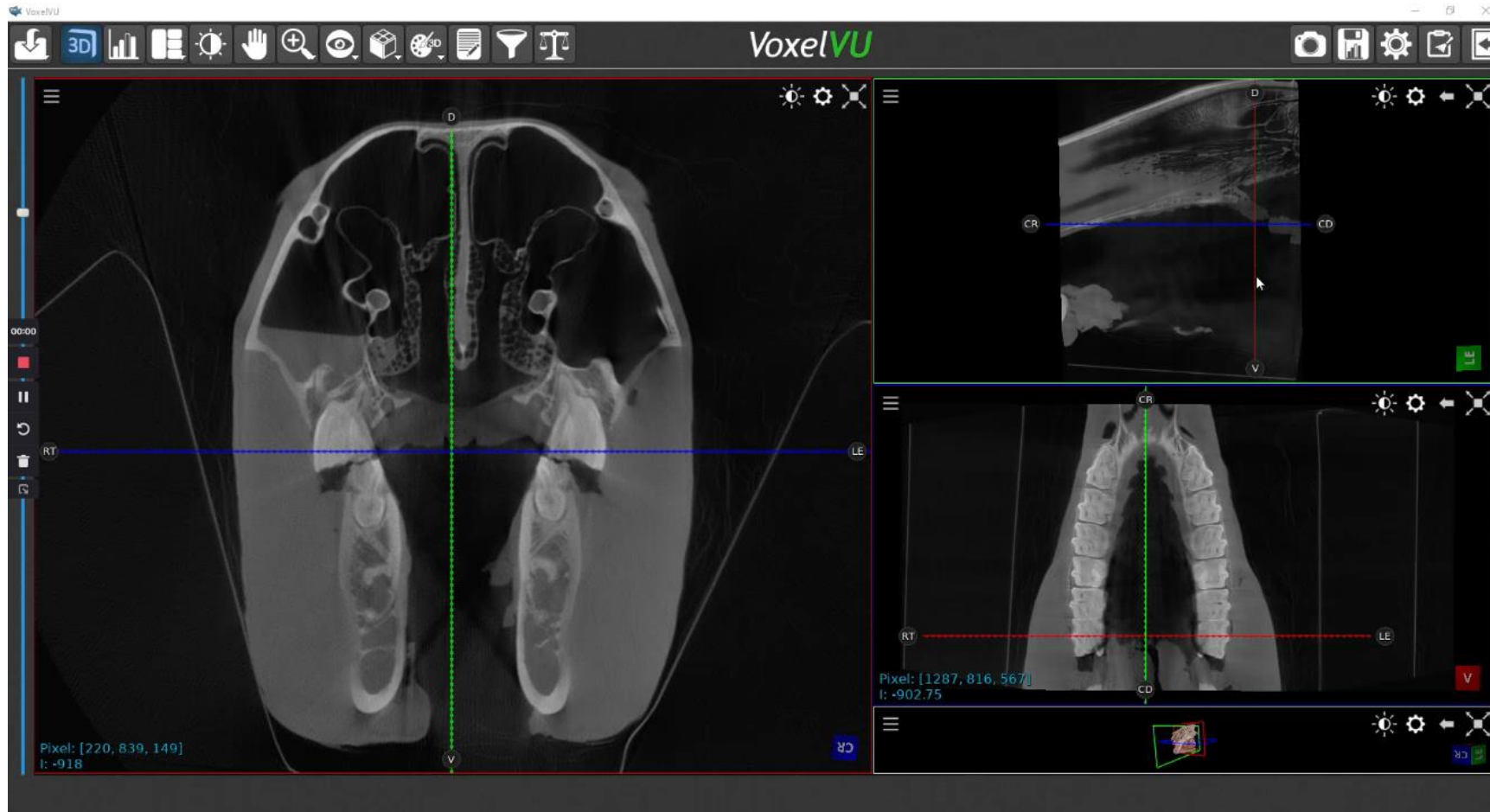
Courtesy of Dr. Luis Lamas

HEAD – STANDING HORSE



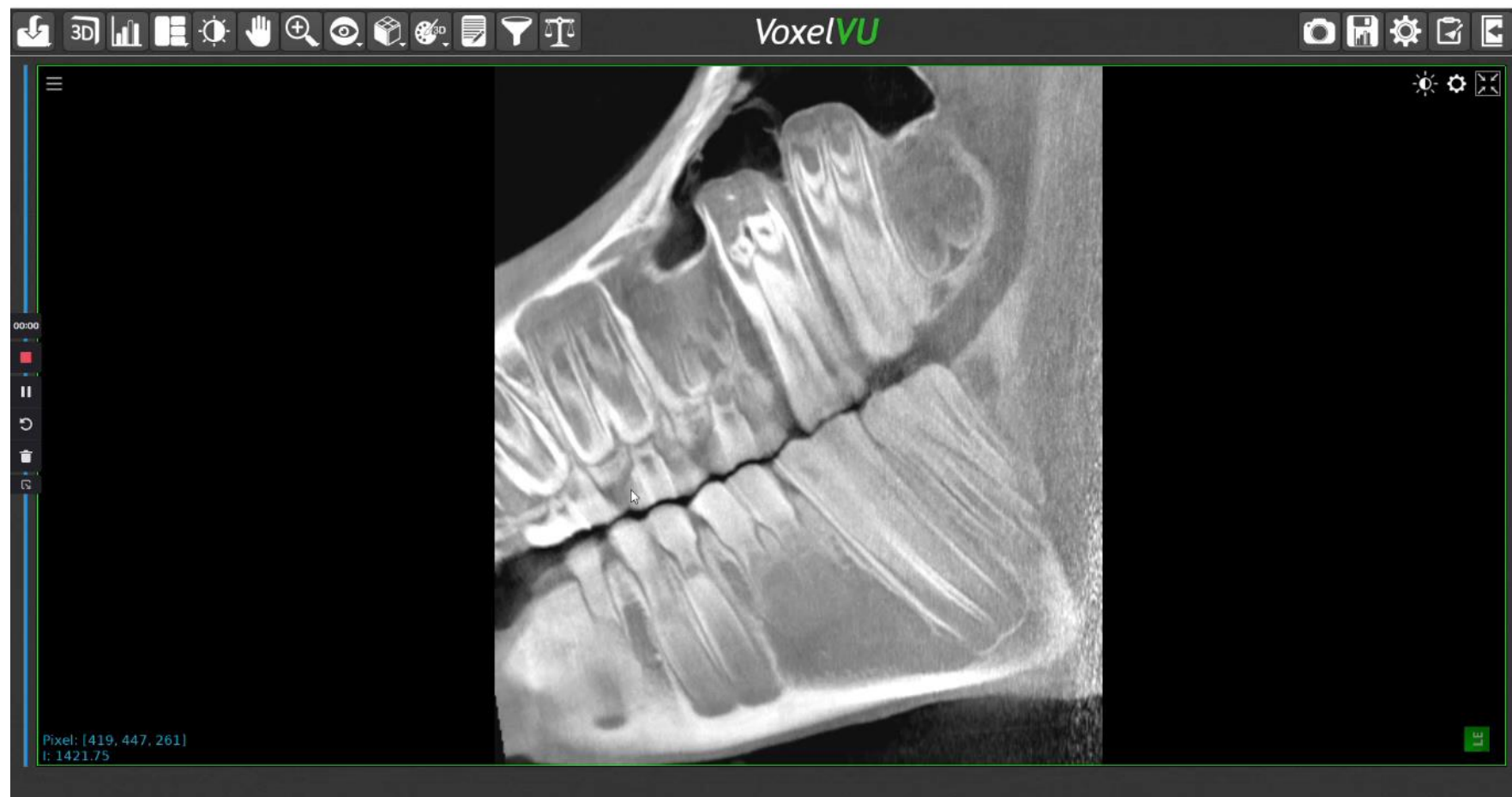
Courtesy of Dr. Werner Jahn

HEAD – STANDING HORSE

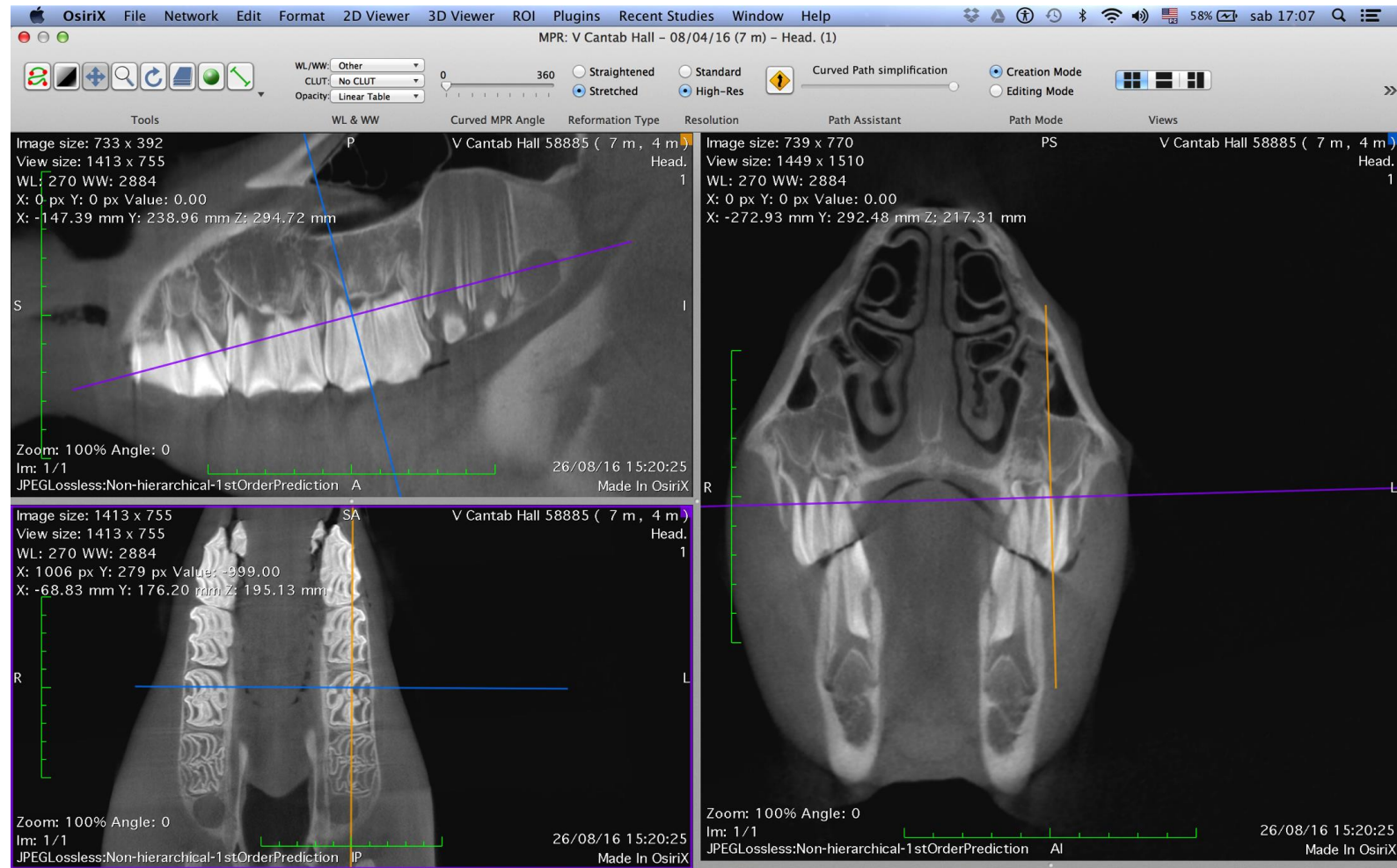


HEAD – STANDING HORSE

Deciduous and permanent teeth



HEAD – STANDING HORSE



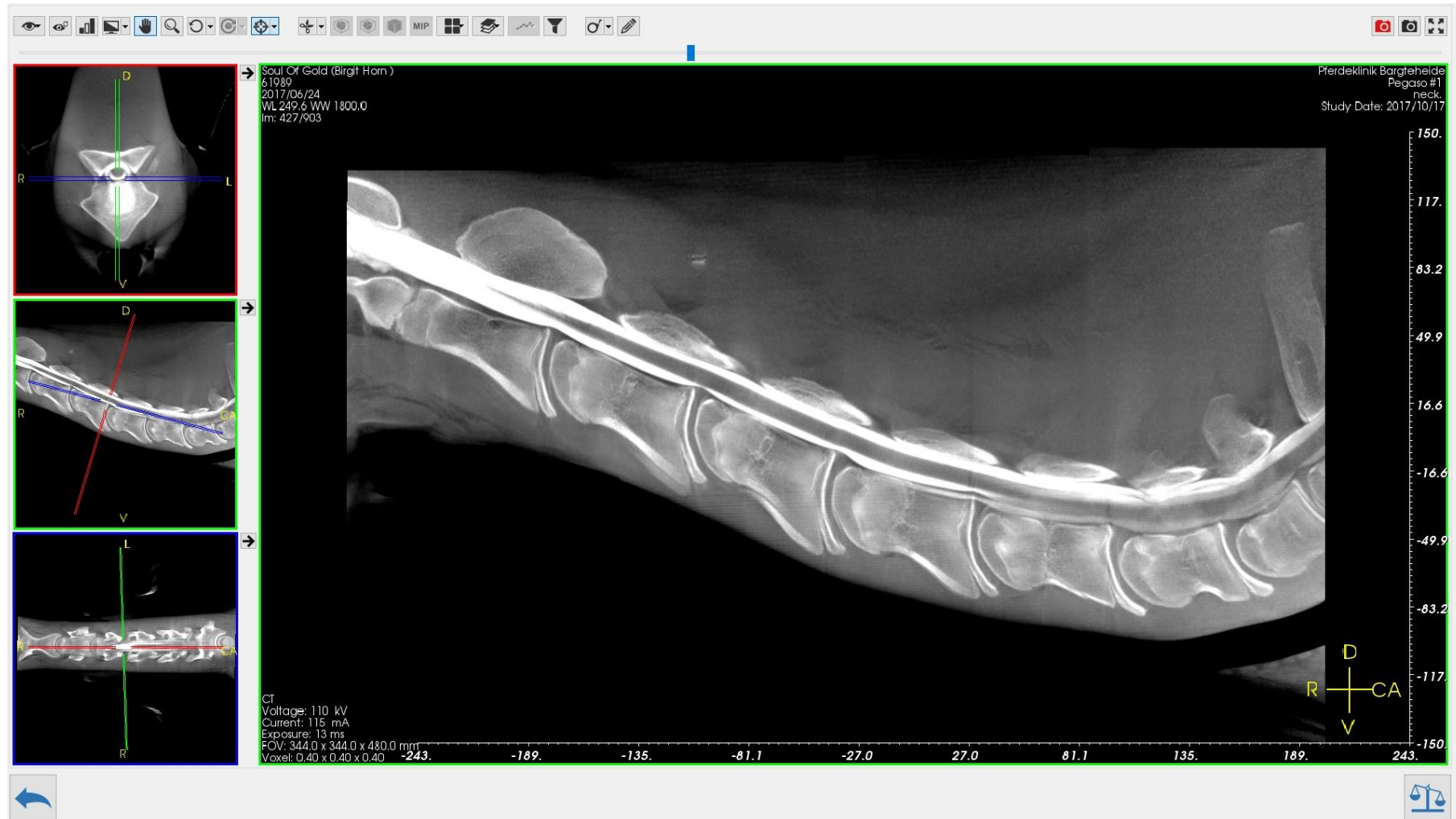
Courtesy of Dr. Werner Jahn

NECK – MYELOGRAM IN GENERAL ANESTHESIA



Courtesy of Dr. Werner Jahn

NECK – MYELOGRAM IN GENERAL ANESTHESIA



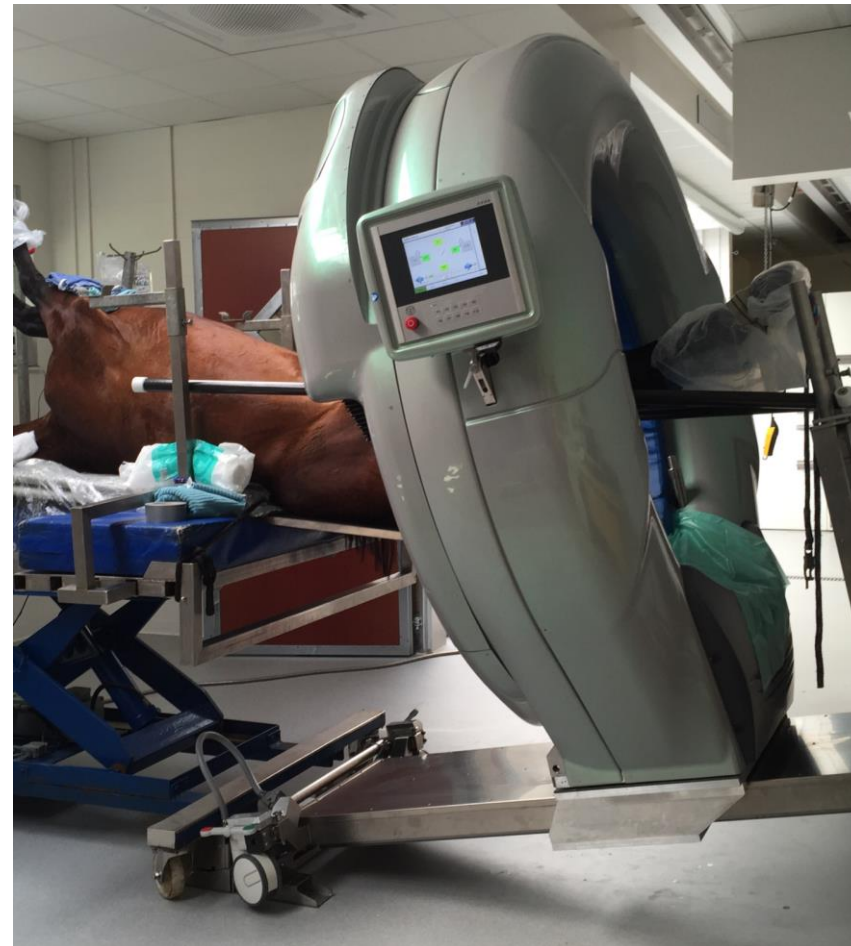
Courtesy of Dr. Werner Jahn

NECK – MYELOGRAM IN GENERAL ANESTHESIA



Courtesy of Dr. Werner Jahn

STIFLE – DORSAL ACQUISITION



Courtesy of Dr. Werner Jahn

STIFLE – LATERAL AQUISITION



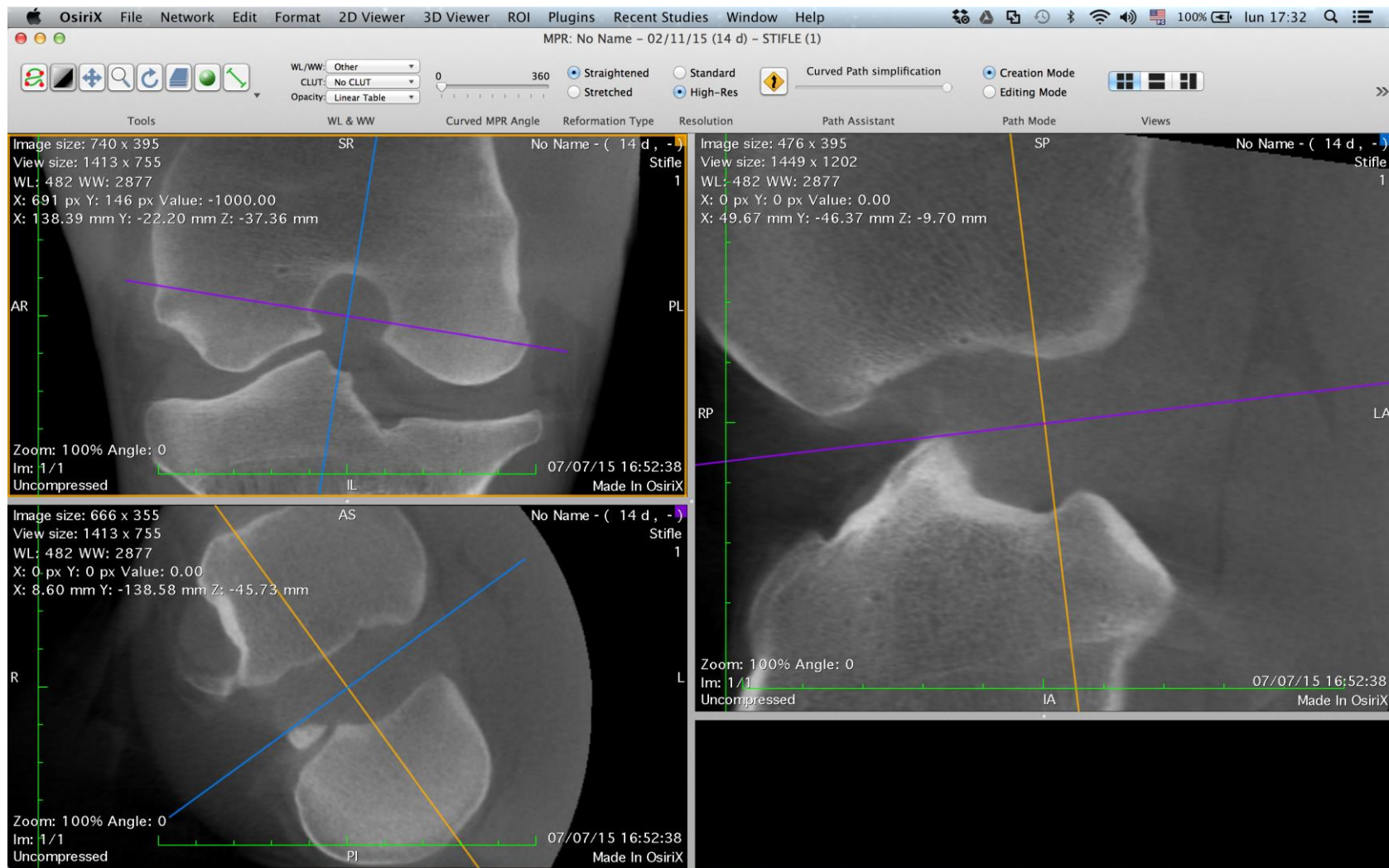
Courtesy of Dr. Chris Kawchack

STIFLE



Courtesy of Dr. Werner Jahn

STIFLE



Courtesy of Dr. Werner Jahn

HOCK – GENERAL ANESTHESIA



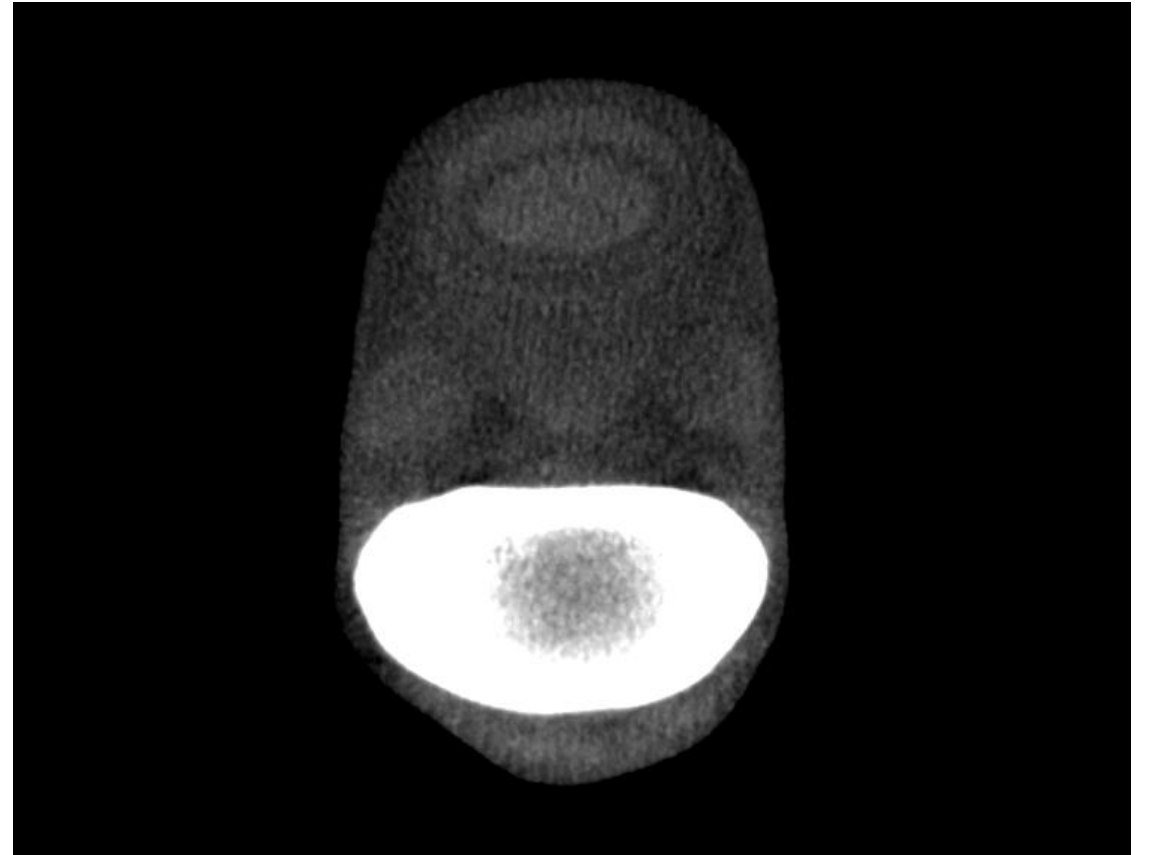
Courtesy of Dr. Lamas

HOCK – GENERAL ANESTHESIA



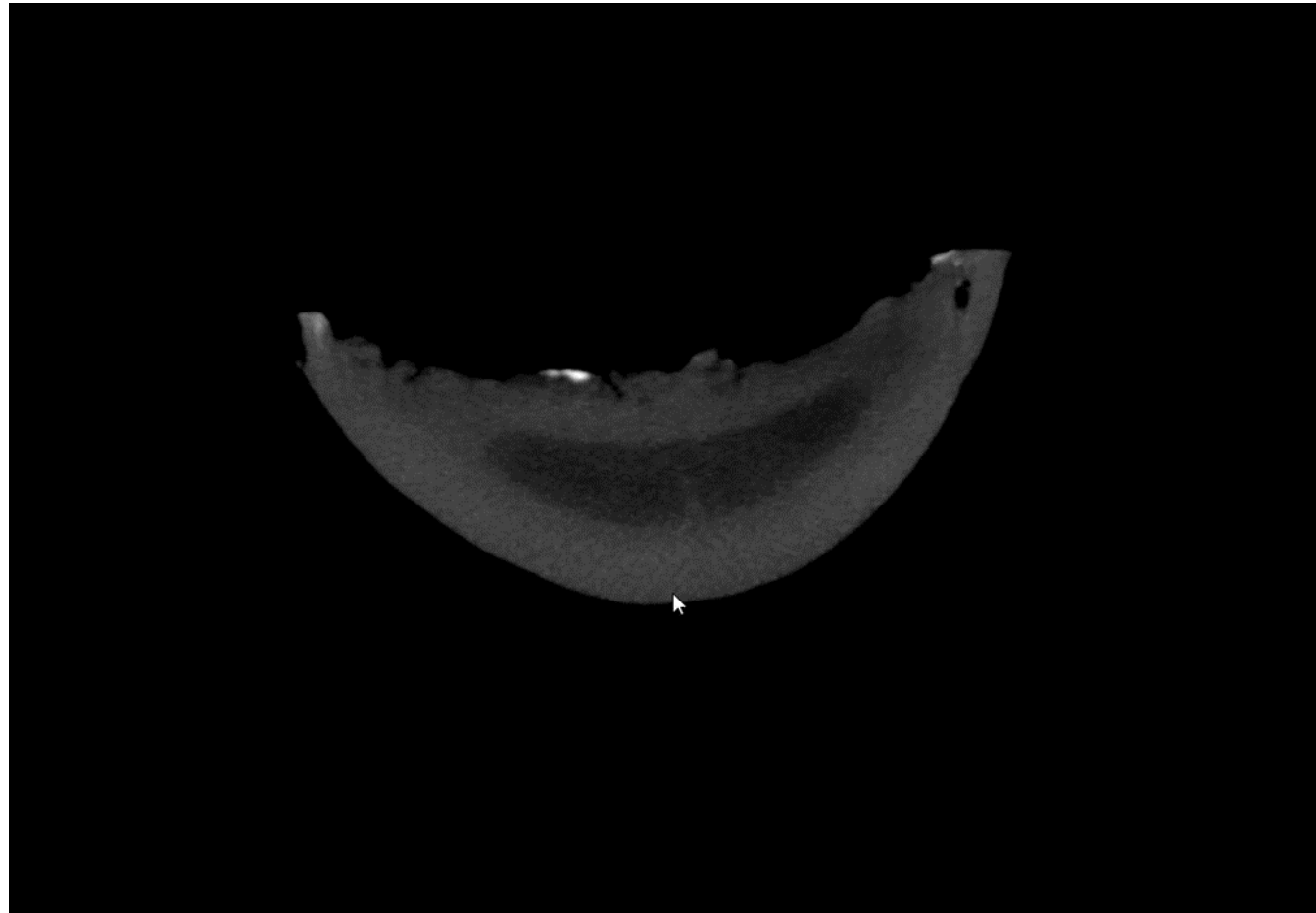
Courtesy of Dr. Lamas

FETLOCK – GENERAL ANESTHESIA



Courtesy of Dr. Lamas

FETLOCK – GENERAL ANESTHESIA



Courtesy of Dr. Lamas

HIP – UNDER GA



PEGASO EVOLUTION

LIMBS IN THE STANDING HORSE

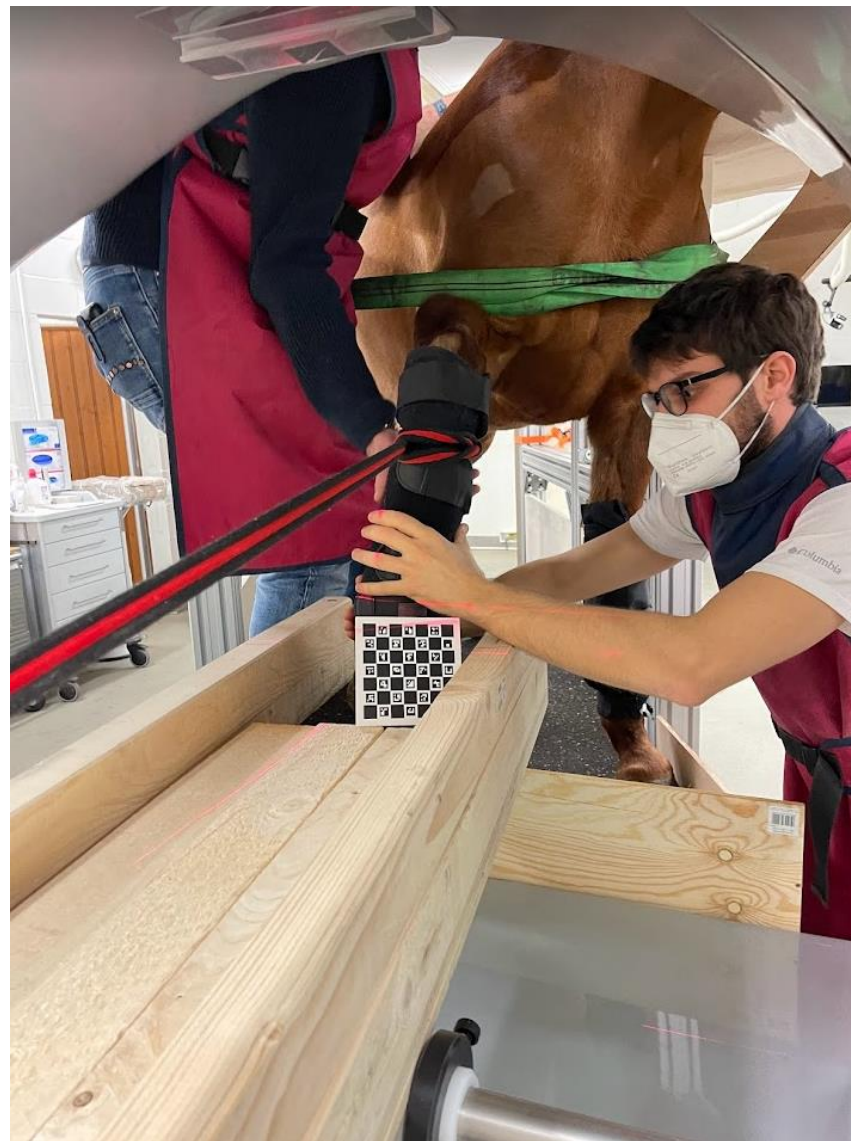
THE STANDING HORSE – PLATFORM FOR HORSES



THE STANDING HORSE – PLATFORM FOR HORSES



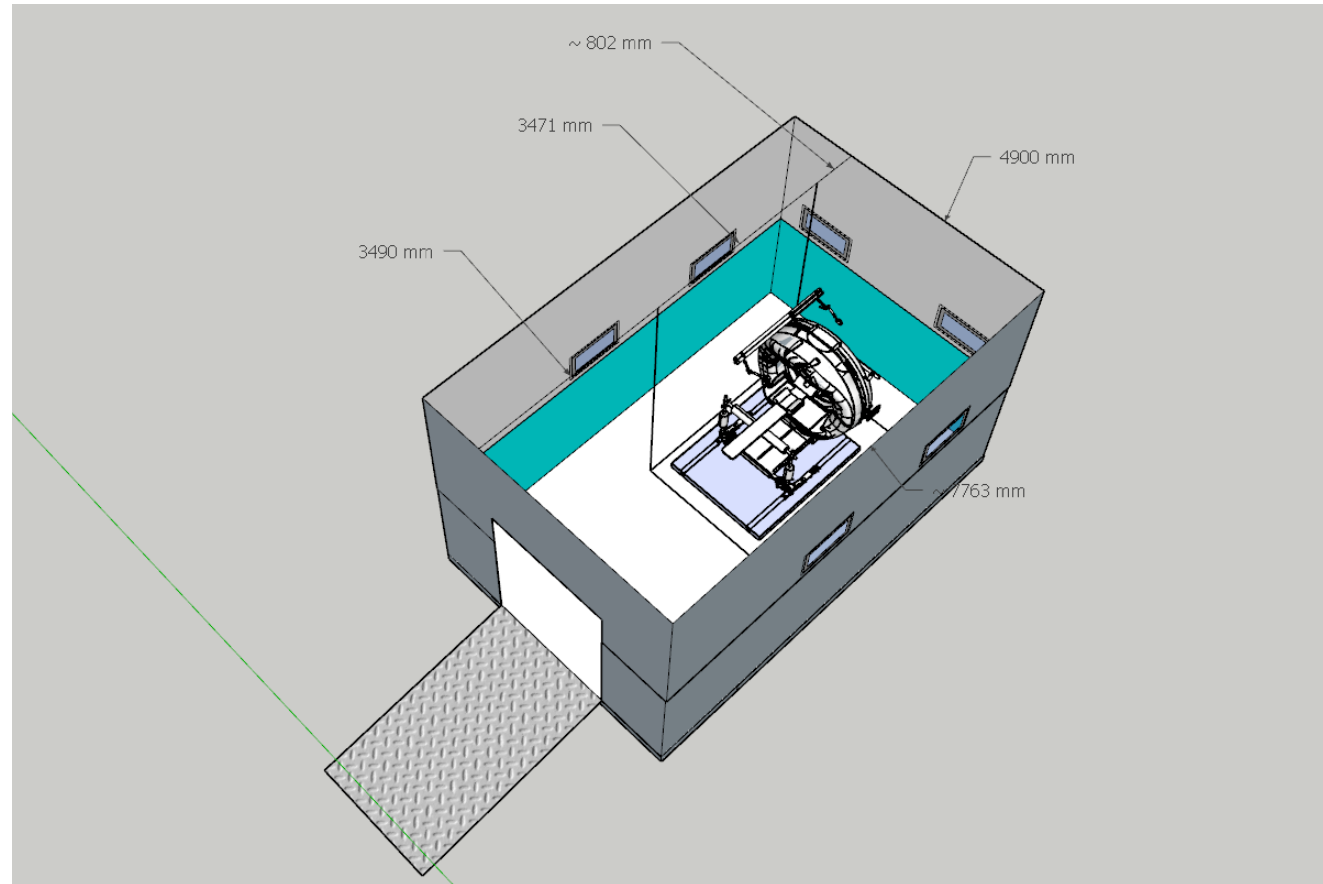
THE STANDING HORSE – PLATFORM FOR HORSES



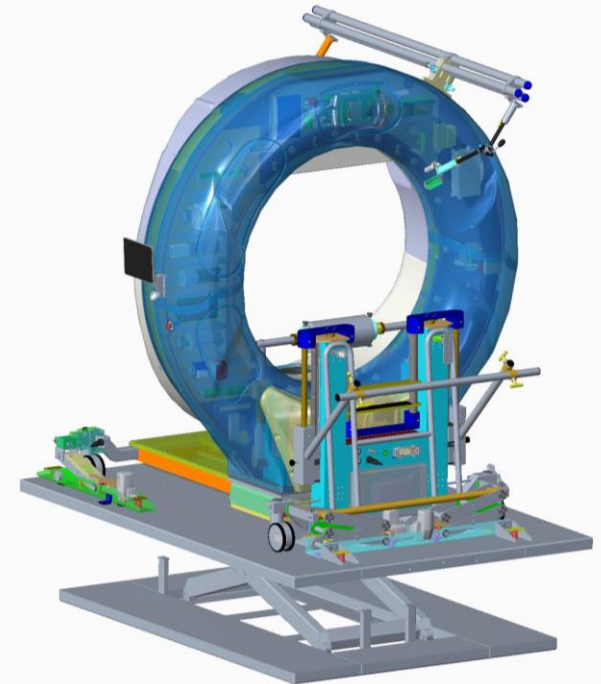
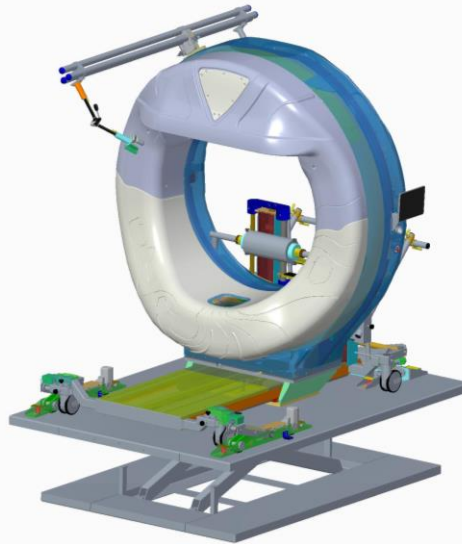
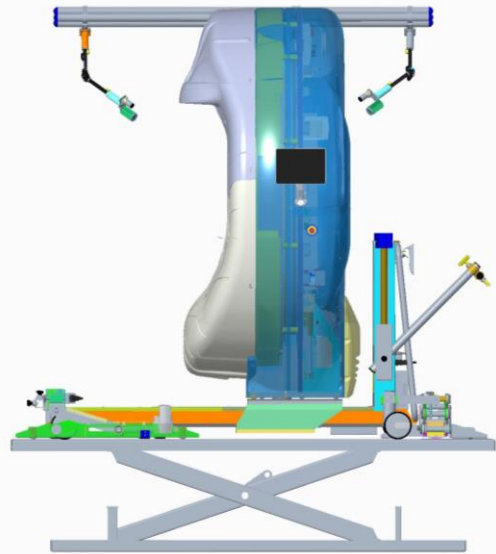
THE STANDING HORSE – PLATFORM FOR HORSES



THE STANDING HORSE – BUILDING FOR LIMBS



THE STANDING HORSE – LIFTING PLATFORM FOR PEGASO



PEGASO EVOLUTION PACKAGE

PEGASO **EVOLUTION** - THE SMART MACHINE

The PEGASO EVOLUTION HDVI technology is A SMART CHOICE:

- less cost of installation
 - less cost of electricity
 - less cost of maintenance

 - Used both in DIAGNOSTIC and SURGERY
 - Combines CT + FL
 - Safer for staff and patients: less radiation
- with THE SAME IMAGE DIAGNOSTIC QUALITY AT A HIGHER RESOLUTION.

PRODUCED SPECIFICALLY FOR VET

PEGASO **EVOLUTION** PACKAGE



- ✓ Pegaso imaging Scanner Unit
- ✓ Pegaso Workstation Console
- ✓ Ct and Fluoroscopy
- ✓ Patient support table - (translucent, carbon fiber)
- ✓ Dedicated cushions' support
- ✓ Camera system for motion correction
- ✓ Lifter system
- ✓ Handswitch and footswitch
- ✓ On-Site Training and follow-up for 3 months
- ✓ First year Warranty (12 months) – full coverage
- ✓ Possible Extended Warranty, Service and Support: annual options to fit your long-term needs

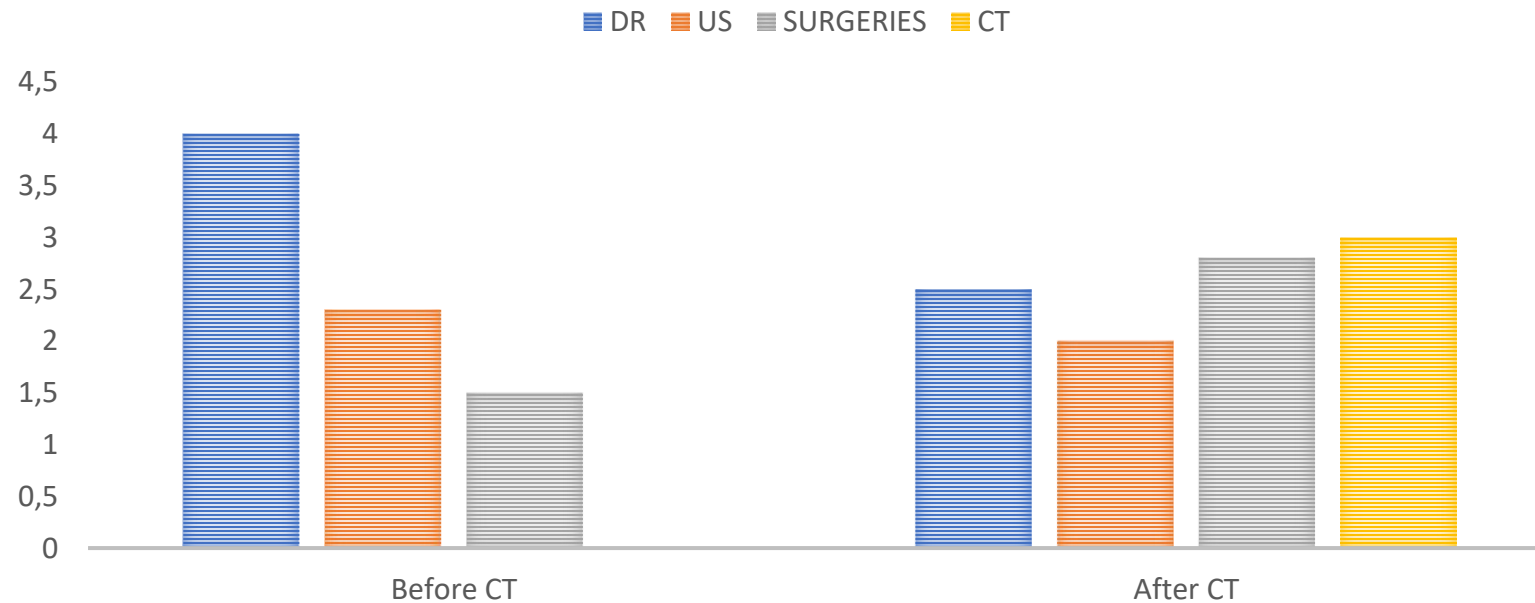
PEGASO **EVOLUTION**

**ECONOMIC CASE AND GROWING
PRACTICE REVENUE**

How does this imaging platform deliver Value to you and your practice?

- Used in diagnostic, pre-surgery, intra surgical, follow-up procedure.
- Many radiographs and ultrasounds becomes CTs. DR + US → CT
- Surgeries procedures increase

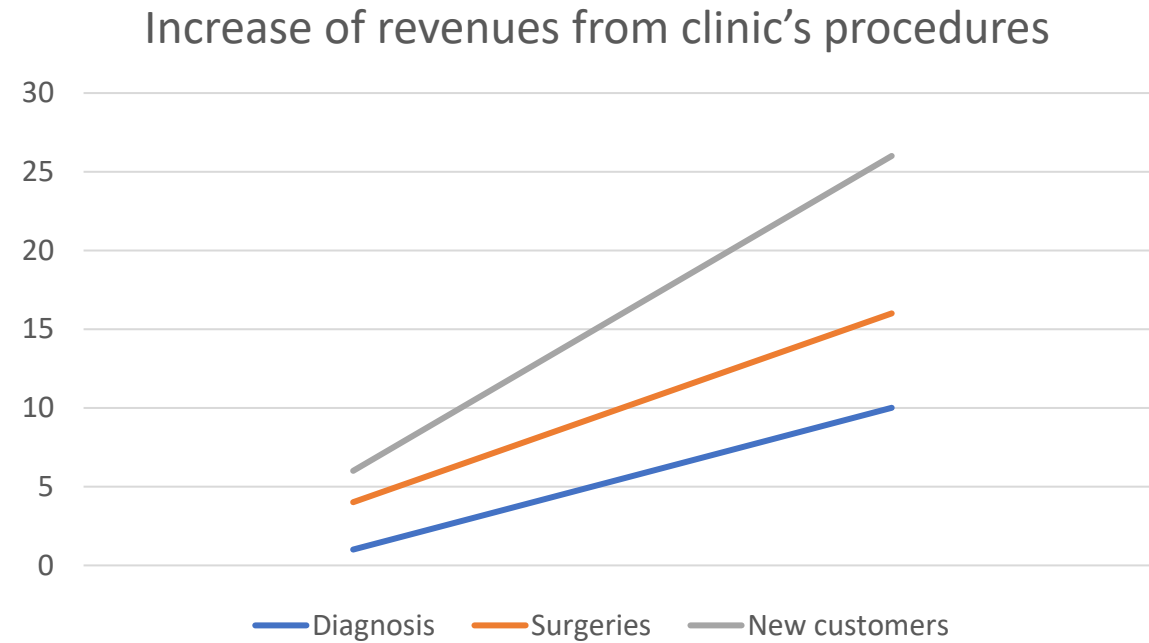
CT PURCHASE: DAILY WORKFLOW CHANGES



How does this imaging platform deliver Value to you and your practice?

PRIMARY IMAGING solution for your practice:

- ✓ Clinical diagnosis
- ✓ Gives intra-procedural options
- ✓ Understanding drives owner confidence and trust: customers increase



PROUDLY INSTALLED IN



COLORADO STATE UNIVERSITY



WAKE FOREST UNIVERSITY



THE UNIVERSITY
of EDINBURGH



PEGASO EVOLUTION

