



UNIVERSITY OF MURCIA
Department of Veterinary Anatomy

**XIX POSTGRADUATE COURSE
PLASTINATION AS A RESEARCH TOOL**

May 14-15th, 2020
Faculty of Veterinary
Murcia, Spain

PRELIMINARY PROGRAM

Thursday 14th

09:00 WELCOME

9:15-10:45: **Epoxy Techniques** (Salón de Grados)

- Overview: Epoxy plastination techniques (15') (Bob Henry / Rafael Latorre)
- Epoxy plastination and research (20') (Ming Zhang)

E12 Technique: Keynotes

- Dehydration (15') (Kees de Jong)
- Impregnation (15') (Constantin Sora)
- Casting/curing (15') (Octavio López)

10:45 **Coffee** (Veterinary Faculty)

11:00 **Practice session in plastination lab:**

- **Common task:** Preparation of frozen specimens for E12 sectioning / Sections of frozen specimens in a band saw
- **Station 1:** Necessary equipment for epoxy techniques // Good and bad results with E12 technique
- **Station 2:** Cleaning of frozen specimens before dehydration
- **Station 3:** Dehydration and defatting (E12)

13:30 **Lunch** (Veterinary Faculty)

14:30 **Practice session in plastination lab:**

- **Common task 1:** Preparation of impregnation bath (E12)
- **Common task 2:** Monitoring impregnation at room t^a (E12)
- **Common task 3:** Casting/curing sandwich method (E12)
- **Common task 4:** Dismantling of sandwich cured slices (E12)

17:00 **Questions and discussion**

20:30 **Dinner** (participants and professors)



Friday 15th

9:00-10:10 **E12 + E6+ E600 Technique: Keynotes** (Salón de Grados)

- Dehydration (15') (Kees)
- Impregnation (15') (Constantin)
- Casting/curing (15') (Octavio)
- Post-curing processing: scanning and 3D reconstructions (15') (Constantin)

10:10 **Coffee** (Veterinary Faculty)

10:30 **Practice session in plastination lab**

- **Common task 1:** Dehydration and defatting of block tissue
- **Common task 2:** Impregnation: setting impregnation mixture
- **Common task 3:** End of impregnation: casting/curing of impregnated block
- **Demonstration:** Drilling the cured epoxy block casting

11:15 **Practice session in Microscopy Service**

- **Common task 1:** Ultrathin sectioning of epoxy block (diamond band saw)
- **Station 1:** Casting of ultrathin slices
- **Station 2:** Grinding of ultrathin slices
- **Station 3:** Staining and visualization with magnification glasses and light microscope

13:30 **Lunch** (Veterinary Faculty)

14:30 **Transport to laboratory of health research** (LAIB)

15:00 **Practice session in laboratory of health research** (LAIB)

- **Station 1:** Scanning and rendering of 3D models with AMIRA
- **Station 2:** Viewing of ultrathin slices with confocal microscope

17:30 **Questions and discussion of potential research projects.**

18:00 **Workshop evaluation**

18:30 **Closing**

20:30 **Working dinner** (professors)