



## 2° Practical training

**ULTRASOUND AND COLOR DOPPLER APPLICATIONS IN KIDNEY AND URINARY TRACT DISEASES**Professor: *Mario Meola (Pisa)***I Day****Clinical and ultrasound evaluation of the donor and the recipient patient. Abdominal Ultrasound examination. EcocolorDoppler of epiaortic and lower limb arterial and venous vessels.**09.00/11.00  
11.00/11.15 - Coffee break  
11.15/13.15

Practical training on ultrasound examination of outpatients (one patient every 30 minutes). Each participant must personally perform the examination, led by the tutor, and he has to propose a final report.

13.15/15.00 - Light lunch

**Thyroid diseases in uremic patients. Endocrinological diseases in chronic kidney disease. Adrenal gland pathologies.**15.00/17.00  
17.00/17.15 - Coffee break  
17.15/19.15

Practical training on ultrasound examination of outpatients (one patient every 30 minutes). Each participant must personally perform the examination, led by the tutor, and he has to propose a final report.

**II Day****Surveillance project of vascular accesses. Evaluation of arterial and venous pre-surgical mapping. Flow measurement with color Doppler.**09.00/11.00  
11.00/11.15 - Coffee break  
11.15/13.15

Practical training on ultrasound examination of outpatients (one patient every 30 minutes). Each participant must personally perform the examination, led by the tutor, and he has to propose a final report.

13.15/15.00 - Light lunch

**Pecutaneous renal biopsy and fine needle aspiration: technical procedures.**15.00/17.00  
17.00/17.15 - Coffee break  
17.15/19.15

Practical training on ultrasound examination of outpatients (one patient every 30 minutes). Each participant must personally perform the examination, led by the tutor, and he has to propose a final report. Clinical cases of all techniques not seen in vivo will be explained with recorded video cases or case reports organized with multiple choice questions.

**III Day****Bone and joint diseases of uremic and dialysis patients.**09.00/11.00  
11.00/11.15 - Coffee break  
11.15/13.15

Practical training on ultrasound examination of outpatients (one patient every 30 minutes). Each participant must personally perform the examination, led by the tutor, and he has to propose a final report. Clinical cases of all techniques not seen in vivo will be explained with recorded video cases or case reports organized with multiple choice questions.

13.15/15.00 - Light lunch

**Liver and gastrointestinal comorbidities of uremic patients.**15.00/17.00  
17.00/17.15 - Coffee break  
17.15/19.15

Practical training on ultrasound examination of outpatients (one patient every 30 minutes). Each participant must personally perform the examination, led by the tutor, and he has to propose a final report



## 2° Practical training

**ULTRASOUND AND COLOR DOPPLER APPLICATIONS IN KIDNEY AND URINARY TRACT DISEASES**

---

**Professor: Mario Meola (Pisa)**

**IV Day**

09.00/11.00

11.00/11.15 - Coffee break

11.15/13.15

13.15/15.00 - Light lunch

15.00/17.00

17.00/17.15 - Coffee break

17.15/19.15

**Testicles and prostate. Uterus and ovaries.**

Practical training on ultrasound examination of outpatients (one patient every 30 minutes). Each participant must personally perform the examination, led by the tutor, and he has to propose a final report.

**Second level techniques. When and why.**

Clinical cases of all techniques not seen in vivo patients will be explained with recorded video cases or case reports organized with multiple choice questions.

**V Day**

09.00/11.00

11.00/11.15 - Coffee break

11.15/13.15

13.15/15.00 - Light lunch

**Videoprojection of clinical cases.**

15.00/19.00

**Practical examination**

Each student has to perform an ultrasound examination and then the whole group will discuss about the final report.  
The candidate must demonstrate that he has acquired the basic technique of ultrasound B-Mode examination (setting, gain setting, TGC, acoustic power, dynamic range, focus, ...) and in color- power Doppler mode (anatomic window, operating frequencies, color box control, sample volume, artifacts correction).