



Simulation-based training curriculum for urology residents

May 8th 2024

Humanitas University – Via Rita Levi Montalcini 4 Pieve Emanuele MI

Rationale:

A complete urology training residency programme must embrace multiple requirements to produce competent, skilled, and trained urologists. However, the new generation of urology residents are prone to more learning hurdles in the operating room (OR) than previous generations. Surgical exposure of Italian and European urology residents for invasive procedures, confidence in performing these procedures, and overall satisfaction with training is low.¹⁻³ Ethical concerns about acquiring surgical skills at the start of the learning curve on real patients and the demands imposed by a zero-complication ethos expected by patients, have induced surgical trainers to challenge the current training apprenticeship model paradigm. All these reasons have prompted the exploration of alternative approaches to learning in the OR. With influences from the military and aviation industries, which heavily depend on simulation-based training, there has been widespread adoption of surgical simulation. Recent evidence showed that this strategy enhances progression at least along the initial phase of the learning curve. Effective simulation can provide safe and controlled environments outside of the OR in which residents can acquire surgical skills without endangering patient safety.^{4,5}

In particular this course will provide a **Urological cadaver lab: a one-day training session on cadaver.**

Programme – May 8th 2024

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| 08.30 | Welcome and registration |
| 08.45 | Welcome Address and Course presentation <i>N. Buffi</i> |
| 09.00 – 12.30 | Practical Session – Cadaver Lab Part I |

Tutors: N.M. Buffi / V. Fasulo / G. Lughezzani / P. Casale / M. Paciotti / A. Saita
Dedicated tutors will led the trainees to perform the following procedure on the cadaver, according to year of residency (GPY).

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| SURGERIES |
| Penile surgery¹ |
| Scrotal surgery² |
| Advanced Penile surgery³ |
| Robot-Assisted Renal and Ureteral Surgery |
| Robot-assisted Radical Prostatectomy: Trocar placement |
| Robot-assisted Radical Prostatectomy: assistant surgeon |
| Robot-assisted Radical Prostatectomy: console surgeon |

¹ Penile surgery includes: frenuloplasty; circumcision



² *Scrotal surgery includes: scrotal lifting; hydrocele repair sec Jaboulay/Winkleman; eversion of the tunica vaginalis; radical orchiectomy*

³ *Advanced penile surgery includes: corporoplasty with tunical shortening procedures (Nesbit and Yachia); -corporoplasty with tunical lengthening procedures (preputial patch); inflatable penile prosthesis implantation with reservoir in the Retzius space (Coloplast Titan Touch 0 Degree)*

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| 12.30 – 13.30 | Lunch break |
| 13.30 – 17.30 | Practical Session – Cadaver Lab Part II <i>Tutors: N.M. Buffi / V. Fasulo / G. Lughezzani / P. Casale / M. Paciotti / A. Saita</i> |
| 17.30 | Course conclusion |

FACULTY:

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|---------------------|---|
| Nicolò Maria Buffi | Director of the School of Residency in Urology, Humanitas University. Full Professor in Urology. Assistant Professor in the Department of Urology, Humanitas Research Hospital. |
| Vittorio Fasulo | Assistant UO Urology, IRCCS Humanitas Mirasole |
| Giovanni Lughezzani | Assistant UO Urology, IRCCS Humanitas Mirasole |
| Paolo Casale | Head of Urology Operating Unit, IRCCS Humanitas Mirasole |
| Marco Paciotti | Resident, UO Urology, IRCCS Humanitas Mirasole |
| Alberto Saita | Section Head of Endourology - Assistant Director Urology, IRCCS Humanitas Mirasole |