

## 2<sup>nd</sup> Interdisciplinary practical training course “Brachytherapy (interventional RT) in cervical cancer”

**Wednesday, April 17**

| Course opening |   |  |            |
|----------------|---|--|------------|
| 12:30-12:45    | Gemelli ART welcome<br>Interventional Oncology Center (IOC) welcome<br><br>Faculty introduction | Maria Antonietta Gambacorta<br>Luca Tagliaferri<br><br>Faculty | Aula Forum |
| 12:45-12:50    | BrachyAcademy welcome   | Elena Dizendorf  | Aula Forum |
| 12:50-13:00    | Course program overview   | Luca Tagliaferri   | Aula Forum |

| SESSION 1. Imaging in GYN brachytherapy |   |   |            |
|---|---|---|------------|
| 13:00 – 14:40                           | Imaging:<br><br>MRI, CT: general information (30')<br><br>Ultrasound: general information (30')<br><br>The use of imaging in brachytherapy procedures (20')<br><br>Discussion (20') | Evis Sala<br><br>Antonia Testa<br><br>Luca Russo<br><br>Faculty and attendees | Aula Forum |
| <b>14:40 – 15:10</b>                    | <b>Coffee break</b>   |   |            |

| SESSION 2. Tumor Board and Patient planning |   |  |            |
|---|---|--|------------|
| 15:10-17:10                                 | Tumor Board:<br><br>Discussion of cervical cancer patients' management  | Chair: Luca Tagliaferri (RO)<br><br>Valentina Lancellotta (RO)<br>Alina Sturdza (RO)<br>Rosa Autorino (RO)<br>Claudia Marchetti (GYN)<br>Benedetta Gui (Radiologist)<br>Giuseppe Colloca (Onco-geriatrician) | Aula Forum |
| 17:10-18:10                                 | “Real life” patient planning for brachytherapy”<br><i>what should we do before the procedure?</i><br><br><ul style="list-style-type: none"> <li>• Radiation Oncologist point of view (10')</li> <li>• Anesthetist point of view (20')</li> <li>• RTT point of view (5')</li> <li>• Nurse point of view (5')</li> </ul><br>Discussion: 20' | Chair: Bruno Fionda (RO)<br><br>Martina De Angelis (RO)<br>Giuliano Ferrone (Anesthesiologist)<br>Leonardo Bannoni (Nurse)<br>Patrizia Cornacchione (RTT)  | Aula Forum |
| 18:10-18:30                                 | Back to the Future: The role of artificial intelligence in interventional radiotherapy  | Luca Tagliaferri (RO)  | Aula Forum |
| <b>18:30</b>                                | <b>Walking together to the restaurant</b>   |  |            |
| <b>19:00–21:30</b>                          | <b>“Aperitivo” and Dinner with participants and faculty in “typical roman restaurant”</b>   |  |            |

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| Time  | Lecture/activity   | Presenter/ Moderator                                      | Location   |
|---|--|---|------------|
| <b>SESSION 3. GYN brachytherapy procedure video</b> |  |   |            |
| 9:00-9:30   | General information on operating room organization (staff, instruments, equipment) | Bruno Fionda<br>Patrizia Cornacchione<br>Leonardo Bannoni | Aula Forum |
| 9:30-10:30  | GYN brachytherapy procedure video (20')<br>Discussion (40')                        | Luca Tagliaferri<br>Valentina Lancellotta                 | Aula Forum |
| <b>10:30–10:50</b>                                  | <b>Coffee break</b>  |   |            |

| <b>SESSION 4. Lectures: Rationale for interstitial needles, contouring, applicator reconstruction and treatment planning</b> |  |                                     |            |
|--|--|-------------------------------------|------------|
| 10:50-11:50  | Basic information on how to preplan an implant, when to use intracavitary only and when interstitial needles | Alina Sturdza                       | Aula Forum |
| 11:50-12:10  | From pre-IRT MRI to CT with applicator in situ:<br>Basics of contouring                                      | Luca Russo<br>Valentina Lancellotta | Aula Forum |
| 12:10-13:10  | Basics of applicator reconstruction and planning   | Christian Kirisits                  | Aula Forum |

| <b>SESSION 5. Patient journey: Patient 1</b> |  |  |                                 |
|--|--|--|---------------------------------|
| 13:10-13:40                                  | Case presentation<br><br>Discussion:<br>- Pre-IRT MRI<br>- Applicator selection  | Martina De Angeli<br><br>Luca Russo<br>Alina Sturdza<br>Valentina Lancellotta  | Aula Forum                      |
| <b>13:40 – 14:25</b>                         | <b>Lunch</b>   |  |                                 |
| 14:25-15:25                                  | Hands-on training:<br>Applicator insertion with and w/o TRUS guidance (radiation oncologists)<br><br>OR<br>Applicator reconstruction (medical physicists*) | Faculty  | Exercise room<br><br>Aula Forum |
| 15:25-16:25                                  | Hands-on training: CT-based contouring using pre-IRT MRI   | Faculty (involving Radiologist - Luca Russo)   | Aula Forum                      |
| <b>16:25 – 16:45</b>                         | <b>Coffee break</b>  |  |                                 |
| 16:45-17:45                                  | Hands-on training: Treatment planning and evaluation   | Faculty  | Aula Forum                      |
| 17:45-18:00                                  | Discussion: Patient 1  | All  | Aula Forum                      |
| 18:00-18:30                                  | The Patient Centric Approach: the Gemelli ART vision   | Luca Tagliaferri   | Aula Forum                      |
| 18:30-19:30                                  | Gemelli ART tour   | Bruno Fionda (Ward)<br>Valentina Lancellotta (IOC)<br>Elisa Marconi (Children)<br>Silvia Chiesa (EBRT)<br>Sara Scalise (IOC and Ward)<br>Patrizia Cornacchione (IOC) | Gemelli ART                     |

\*Physicist team: Christian Kirisits, Elisa Placidi, Enrico Rosa, Michael Niekamp

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|--|--|---|-------------------------------------|
| <b>SESSION 6. Patient journey: Patient 2. Patient care</b> |  |   |                                     |
| 9:00-9:30  | Patient Care and psychological aspect  | Valentina Lancellotta<br>Loredana Dinapoli                                    | Aula Forum                          |
| 9:30-10:00   | Case presentation<br>Discussion:<br>- Pre-IRT MRI<br>- Applicator selection  | Martina De Angeli<br><br>Luca Russo<br>Alina Sturdza<br>Valentina Lancellotta | Aula Forum                          |
| 10:00-11:15  | Hands-on training:<br>Applicator and straight needles insertion with and w/o TRUS guidance (radiation oncologists)<br><br>OR<br><br>Treatment planning and workflow optimization (medical physicists*) | Faculty   | Exercise room<br><br><br>Aula Forum |
| <b>11:15 – 11:35</b>                                       | <b>Coffee Break</b>  |   |                                     |
| 11:35-12:50  | Hands-on training: CT-based contouring using pre-IRT MRI   | Faculty (involving Radiologist - Luca Russo)                                  | Aula Forum                          |
| 12:50-14:05  | Hands-on training: Treatment planning and evaluation   | Faculty   | Aula Forum                          |
| 14:05-14:20  | Discussion: Patient 2  | All   | Aula Forum                          |

| <b>Course closing</b> |                            |                                      |            |
|-----------------------|----------------------------|--------------------------------------|------------|
| 14:20-14:50           | Final discussion           | All                                  | Aula Forum |
| 14:50-15:00           | Course evaluation, closing | Luca Tagliaferri,<br>Elena Dizendorf | Aula Forum |

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