ESSO Course on Fluorescence-Guided Surgery
Leiden (NL), 16th to 17th April 2020

Chairs
Sven Mieog, Leiden University Medical Center, Leiden, NL
Karol Polom, Medical University of Gdansk, Gdansk, PL
Alexander Vahrmeijer, Leiden University Medical Center, Leiden, NL

Faculty members
Friso Achterberg, Leiden University Medical Center, Leiden, NL
Bert Bonsing, Leiden University Medical Center, Leiden, NL
Elisa Cassinotti, IRCCS – Ca’Granda – Policlinico Hospital of Milan, Milan, IT
Marion Deken, Leiden University Medical Center, Leiden, NL
Michele Diana, IRCAD, Strasbourg, FR
Sylvain Gioux, University of Strasbourg, FR
Sophie Hernot, Free University of Brussels, Brussels, BE
Koen Peeters, Leiden University Medical Center, Leiden, NL

Program
Thursday 16th April

09.00 – 09.15 Welcome and introduction
S. Mieog

09.15 – 09.45 Basics of fluorescence imaging
S. Gioux

09.45 – 10.15 What the surgeon should know about fluorophores (non-targeted)
S. Hernot

10.15 – 10.30 Short history of fluorescence imaging in surgical oncology
K. Polom

10.30 – 11.00 Coffee break

11.00 – 11.15 Currently available camera systems
S. Mieog
State-of-the-art applications

11.15 – 11.45 How I do it: imaging with ICG: lymphatics and tumor tissue
_E. Cassinotti_

11.45 – 12.15 How do I do it: imaging with ICG: biliary tract and perfusion
_M. Diana_

12.15 – 13.00 Lunch

13.00 – 14.30 Dry lab I: testing different fluorophores and fluorescence contrast agents on different imaging system (dilution tests, depth penetration, quenching, synergy fluorophore and imaging systems).
_A. Vahrmeijer, S. Mieog, M. Deken, F. Achterberg, all faculty_

14.30 – 15.00 Challenges in interpretation of fluorescence signals
_S. Gioux_

15.00 – 15.30 Coffee break

15:30-16.00 Fluorescence in Colorectal surgery: clinical implications & artificial intelligence
_M. Diana_

16.00-16:30 Tumor-targeting fluorophores and contrast agent behaviour
_S. Hernot_

16.30 - 17.30 Dry lab II: hands-on practice with various imaging systems
A. Vahrmeijer, S. Mieog, M. Deken, F. Achterberg, all faculty

Friday 17th April

Current and future applications

09.00 – 09.30 How I do it: imaging of tumor tissue
_A. Vahrmeijer_

09.30 – 11.30 Live surgery (colorectal tumor and/or ureter with perfusion; bile duct imaging; liver metastases, other malignancy, sentinel node gynaecology)
Live interaction and discussion
_B. Bonsing, K. Peeters, S. Mieog_

(Coffee break during the session)

Around 10.30 How clinical translation looks in real-life
_F. Achterberg_
Around 11.00  Ongoing and future phase III fluorescence trials  
A. Vahrmeijer

12.00 – 13.00  Lunch

13:00 – 13.30  Summary and farewell  
S. Mieog , K. Polom