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Acknowledgements, About the Author and List of Publications
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ABOUT THE AUTHOR

Esther de Boer was born on December 20th 1989 in Sneek, the Netherlands. In June 2009, she completed her gymnasium at the Marne College in Bolsward, the Netherlands. Three years later, she received her Bachelor in Medical Sciences (cum laude) at the University of Groningen. Upon which she also received an Honors Award for finishing the challenging Junior Scientific aster class (JSM) bachelor research program, parallel with her regular medical training program under close supervision of Dr. Joost Bart and Prof. Dr. Gooitzen M. van Dam. That same year she enrolled in the Groningen MD/PhD program. After having done one year of research at the University Medical Center Groningen in the Optical Imaging Research Group at the Department of Surgery, she performed two years of research at the University of Alabama at Birmingham under close supervision of Prof. Dr. Eben L. Rosenthal, Dr. Jason M. Warram and Prof. Gooitzen M. van Dam In May 2017 she expects to graduate to become a medical doctor. Esther embarks a career as a physician-scientist.
LIST OF PUBLICATIONS

2016

Sensitivity and specificity of cetuximab-IRDye800CW to identify regional metastatic disease in patients with head and neck cancer
Warram JM, Moore LS, de Boer E, Carroll WR, Zinn KR, Rosenthal EL
In progress

Effects of an unlabeled loading dose on tumor-specific uptake of a fluorescently labeled antibody for optical surgical navigation
Submitted to Mol Imaging Biol

Photoimmunotherapy for treatment of residual disease after incomplete resection of squamous cell carcinoma of the head and neck
de Boer E, Warram JM, Tucker MD, Moore LS, Carroll WR, Korb M, Brandwein-Gensler MS, van Dam GM, Rosenthal EL
Submitted to Cancer Medicine

Biodistribution study of intravenously injected cetuximab-IR700 in cynomolgus
de Boer E, Samuel S, French DN, Warram JM, Schoeb TR, Rosenthal EL, Zinn KR

Characterizing the utilities and limitations of repurposing an open-field optical imaging device for fluorescence-guided surgery in head and neck cancer patients
Accepted in J Nucl Med.

Fluorescence imaging to localize head and neck squamous cell carcinoma for enhanced pathological assessment
Warram JM, de Boer E, van Dam GM, Moore LS, Bevans SL, Walsh EM, Young ES, Carroll WR, Stevens TM, Rosenthal EL
Accepted in J Pathol.
Successful translation of fluorescence navigation during oncologic surgery: a consensus report

2015
Fluorescence-guided resection of experimental malignant glioma using cetuximab IRDye800CW
Warram JM, de Boer E, Korb M, Hartman Y, Kovar Y, Markert JM, Yancey Gillespie GY, Rosenthal EL

Folate receptor-beta: is it as relevant in cancer as in inflammatory tissue?
de Boer E, Crane LMA, van Oosten M, van der Veg B, Kooijman P, Low PS, van der Zee AGJ, Arts HJG, van Dam GM, Bart J

In vivo immunohistochemistry: localization of fluorescently labeled cetuximab in head and neck squamous cell carcinomas

A ratiometric threshold for determining presence of cancer during fluorescence-guided surgery
Warram JM, de Boer E, Moore LS, Schmalbach CE, Withrow KP, Carroll WR, Richman JS, Morlandt AB, Brandwein-Gensler M, Rosenthal EL

Safety and tumor-specificity of cetuximab-IRDye800 for surgical navigation in head and neck cancer
On the Horizon: Optical Imaging for Cutaneous Squamous Cell Carcinoma

de Boer E, Moore LS, Warram JM, Conway CH, Brandwein-Gensler MS, van Dam GM, Rosenthal EL, Schmalbach CE
Head Neck, 2015 Apr; [Epub ahead of print]

Laparoscopic fluorescent visualization of the ureter with intravenous IRDye800CW
Korb ML, Huh WK, Boone JD, Warram JM, Chung TK, de Boer E, Bland KI, Rosenthal EL

Optical innovations in surgery

de Boer E, Harlaar NJ, Taruttis A, Nagengast WB, Rosenthal EL, Ntziachristos V, van Dam GM

2014

A standardized light-emitting diode device for photoimmunotherapy

de Boer E, Warram JM, Hartmans E, Bremer PJ, Bijl B, Crane LM, Nagengast WB, Rosenthal EL, van Dam GM

Tissue-simulating phantoms for assessing potential near-infrared fluorescence imaging applications in breast cancer surgery
Pleijhuis R, Timmermans A, De Jong JS, de Boer E, Ntziachristos V, van Dam GM
J Vis Exp., 2014 Sep; 19(91):51776

Antibody-based imaging strategies for cancer
Warram JM, de Boer E, Sorace AG, Chung TK, Kim H, Pleijhuis RG, van Dam GM, Rosenthal EL

2013

Invloed van moleculaire beeldvorming op de oncologische praktijk van de patholoog van nu en later

de Jong JS, de Boer E, van Dam GM
Kankerbreed, 2013 Mar; 5:28-32