Curriculum vitae auctoris

List of Publications

PhD portfolio

Acknowledgements

CURRICULUM VITAE AUCTORIS

Eveline Emma Vietsch was born on the 31st of January 1986 in Seria, Brunei. She graduated from Atheneum in Goes, the Netherlands in 2004. The same year she started medical school at the Erasmus University in Rotterdam. During her study she worked as a student assistant in the dissecting room and was a mentor for the ErasmusMC Anatomy Research Program, EARP. She performed her final clinical rotation at the Department of Clinical Pathology of the Erasmus Medical Center. For her research project under supervision of Prof. Casper van Eijck, she visited the lab of Prof. Anton Wellstein at the Lombardi Comprehensive Cancer Center at Georgetown University in Washington DC, USA for 10 months. After obtaining her medical degree in 2011, she returned to the lab of Prof. Anton Wellstein in Washington DC to work as a research fellow in molecular oncology until 2017, in close collaboration with Prof. Casper van Eijck. She returned to the Erasmus Medical Center in 2017 to continue her research in the field of pancreatic cancer.

LIST OF PUBLICATIONS

This thesis

Vietsch EE, van Eijck CH, Wellstein A. Circulating DNA and Micro-RNA in Patients with Pancreatic Cancer. *Pancreat Disord Ther. 2015 Jun;5(2). pii: 156.*

Rapisuwon S, **Vietsch EE**, Wellstein A. Circulating biomarkers to monitor cancer progression and treatment. *Comput Struct Biotechnol J. 2016 Jun 1;14:211-22.*

Shivapurkar N *, **Vietsch EE** *, Carney E, Isaacs C, Wellstein A.Circulating microRNAs in patients with hormone receptor-positive metastatic breast cancer treated with dovitinib. *Clin Transl Med. 2017 Oct 4;6(1):37.* * **The authors contributed equally to this work**

Vietsch EE, Graham GT, McCutcheon JN, Javaid A, Giaccone G, Marshall JL, Wellstein A. Circulating cell-free DNA mutation patterns in early and late stage colon and pancreatic cancer *Cancer Genet. 2017 Dec;218-219:39-50.*

Vietsch EE, Martinez Roth S, Simmons JK, Javaid A, Park MD, Stenstra MHBC, McCutcheon JN, Berens EB, Peran P, Moussa M, Catalfamo M, Mock BA, Giaccone G, Schmidt MO, Riegel AT, Wellstein A. Impact of drug therapy and the immune system on intratumoral subpopulations in a pancreatic cancer model. Impact of drug therapy and the immune system on intratumoral subpopulations in a pancreatic cancer model. *Submitted*

Vietsch EE, Peran I, Suker M, van den Bosch TPP, Kros JM, Wellstein A and Van Eijck CHJ. Circulating miR-125b-5p and miR-99a-5p are associated with pancreatic cancer progression in patients after surgery. *Submitted*

Other publications

Zhang W, Nandakumar N, Shi Y, Manzano M, Smith A, Graham G, Gupta S, **Vietsch EE**, Laughlin SZ, Wadhwa M, Chetram M, Joshi M, Wang F, Kallakury B, Toretsky J, Wellstein A, Yi C. Downstream of mutant KRAS, the transcription regulator YAP is essential for neoplastic progression to pancreatic ductal adenocarcinoma. *Sci Signal. 2014 May 6;7(324):ra42.*

Rodriguez OC, Choudhury S, Kolukula V, **Vietsch EE**, Catania J, Preet A, Reynoso K, Bargonetti J, Wellstein A, Albanese C, Avantaggiati ML. Dietary downregulation of mutant p53 levels via glucose restriction: mechanisms and implications for tumor therapy. *Cell Cycle. 2012 Dec 1;11(23):4436-46.*

PHD PORTFOLIO

Name PhD student	Eveline Emma Vietsch, MD
Erasmus MC Department	Surgery
Promotors	Prof. Dr. C.H.J. van Eijck
	Prof. Dr. A. Wellstein

Courses

Scientific Paper Writing Class at Georgetown University	2012
Animal Care and Use in Research Education trainings from the Institutional Animal Care and Use Committee (IACUC) Georgetown University	2012
Environment and Health trainings in Lab, biological and fire safety, Blood borne pathogens, basic radiation safety at Georgetown University	2012
Signal Transduction Journal Club Presentations, at the weekly Tumor Biology Journal Club at Georgetown University	2012-2017
Research Data Meeting Presentations, weekly at Georgetown University	2012-2017
Weekly Seminar Series with top-tier visiting international cancer scientists presenting their research at Georgetown University	2012-2017

Oral Presentations

De-convoluting therapeutic resistance in a pancreatic cancer model: Pharmacogenomic evaluation of intratumoral clonal heterogeneity. At the International Targeted Anticancer Therapies (TAT) Congress, Washington DC, USA.	2014
Intratumoral heterogeneity in a mutant KRAS driven pancreatic cancer model: Relevance of clonal dynamics in drug response. At the RAS Initiative Symposium, Frederick, MD, USA.	2016
MicroRNA analysis in liquid biopsies. At the Circulating Biomarkers World Congress, Boston, MA, USA.	2016
Circulating cell-free DNA mutation patterns in early and late stage colon	2018

and pancreatic cancer. At the Arts-Assistenten Vereniging (AAV) Wetenschapsmiddag, Erasmus MC, Rotterdam, the Netherlands.

Circulating microRNAs as treatment response markers of surgery and FOLFIRINOX in patients with pancreatic cancer. At the Pancreas Club Meeting, Washington, DC, USA. 2018

Poster presentations

De-convoluting therapeutic resistance in a pancreatic cancer model: Pharmacogenomic evaluation of intratumoral clonal heterogeneity. At the AACR Pancreatic Cancer Conference Innovations in Research and Treatment, New Orleans, LA, USA 2014

Circulating MicroRNAs as response indicators for the treatment of patients with pancreatic cancer. At The Pancreas Club Annual Meeting, Washington DC, USA 2015

Impact of intratumoral clonal heterogeneity on checkpoint inhibitor response. At The Society for Immunotherapy of Cancer (SITC) Annual Meeting, National Harbor, MD, USA 2016

Circulating MicroRNAs as response indicators for the treatment of patients with pancreato-biliary cancer. At The National Cancer Institute (NCI) Symposium of RNA Biology, Bethesda, MD, USA 2017

Teaching

Mentored and trained a medical student from the Erasmus MC in the lab at Georgetown University 2013-2014

Mentored and trained medical student from the Erasmus MC in the lab at Georgetown University 2014-2015

Mentored and trained a Pre-Med Undergraduate student in the lab at Georgetown University 2014-2017

Mentored and trained a Tumor Biology PhD student in the lab at Georgetown University 2014

Mentored and trained a Tumor Biology PhD student in the lab at Georgetown University	2016-2017
Mentored and trained oncology master student from the Dutch Cancer Institute (NKI) in the lab at Georgetown University	2016-2017
Examiner of the Basic Life Support course for medical students at the Erasmus MC	2018
Teaching assistant for: Pathology: diagnosis and staging of cancer course for medical students at the Erasmus MC	2018

Awards

Research Grant from the Lisa Waller Hayes Foundation, the Netherlands Topic: Serum microRNA response pattern in treatment of pancreatic cancers	2012-2013
Research Grant from The Ruesch Center for the Cure of Gastrointestinal Cancers, USA. Topic: Assessment of the mutation patterns of colon and pancreatic cancers from the analysis of circulating, cell-free tumor DNA.	2016-2017
Erasmus Trustfonds Travel Grant to for the attendance of the Pancreas Club Meeting in Washington DC, USA	2018

ACKNOWLEDGEMENTS

First of all I will express my gratitude to my two promotors **Prof. dr. Casper van Eijck** and **Prof. dr. Anton Wellstein**. When I told **Casper** as a medical student that I aspired to do research in the field of pancreatic cancer in the USA he didn't hesitate to help me reach my goal. **Anton** did have second thoughts at first, to take an unexperienced medical student like myself in his lab at Georgetown University for 10 months. However, after we briefly met for a coffee he gave me the green light to visit his lab for a research project and he never gave up on me since. **Anton**, thank you for sticking with me and visiting me in the Netherlands again, this time for my PhD defense. You have taught me how to think like a cancer scientist, how to focus on clinically relevant molecular biology, and how to explore this using the latest biotechnological approaches. I am grateful for the many years of dedicated training you provided me and hope I will do your effort justice.

Casper, thank you for keeping me on your radar and for visiting Georgetown University in the years I lived in Washington DC. I appreciate your mentorship and your enormous dedication to the care of patients with pancreatic cancer. Most importantly, I am grateful that you welcomed me back in your research team when I returned to the Netherlands. I will continue delving into the biology of this horrible disease to improve treatment options and I am proud to do this along your side.

Prof. dr. J.M. Kros, Prof. dr. J.G.J.V. Aerts and **Prof. dr. H.W.M. van Laarhoven**, thank you for taking the time to assess my thesis and participating in the committee. My special thanks go to **Prof. Kros**, for your kindness and careful evaluation of my work, for opening up your lab to us 'pancreas people', and for the many pushes to get my PhD defense date set. **Members of the small committee**, thank you for your willingness to evaluate my thesis.

My colleagues who I worked with most closely at Georgetown University: **Ivana**, **Marianne**, **Aamir** and **Sarah**. To start with **Ivana**, thank you for teaching me how to perform lab work when I was a naïve medical student with zero experience, and for being my friend who I can always call. We are a fabulous team in tackling pancreatic cancer, but we are just as good at attacking delicious food and wine together along the Croatian coast! **Mari**, you were not only an extraordinary good student, you are the sunshine in the room and a delight to be around. Thanks for joining me in the lab and for bringing me joy during the happy hours, dinners, the snowboarding, dancing, boat rides and many other memorable moments. **Aamir**, for three years you stood by my side in the lab, through my academic struggles, performing hundreds of DNA isolations and PCRs, while being a Straight A pre-med student and a fantastic sax player. Thank you for being a wonderful student. You will be an awesome doctor! **Sarah**, my successor in the lab at Georgetown. Such an ambitious, fast learner. I feel

happy that I could work with you and proud that you are extending my research. I wish you all the best!

My warm wishes and gratitude go to my second family: the Wellstein Riegel Lab at Georgetown University. In the order of location in the lab: **Anna, Anne, Francisco, Elena, Will, Virginie, Ghada, Marcel, Khaled, Ivana, Jeroen, Aamir, Sarah, Jean Baptiste, Suthee, Jordan, Max, Sonia**, **Eric** and **Erika+Joey***. We spent years together doing cool science, drinking coffee, beer and wine, discussing, eating, complaining, and laughing. I enjoyed every moment and if any of you are in Europe, feel free to stop by in Rotterdam!

None of the work in this thesis would be possible without the effort of all the co-authors. To name a few: **Suthee, John, Sarah, Aamir, Marianne, Matthew, Justine, Eric, Ivana, Maha, Garrett, Mustafa, Thierry, Narayan** and **Erin**. Thank you so much for the fruitful and fun collaborations!

My new 'home' at the Erasmus MC: the tumor immunopathology lab with wonderful people: **Dana, Rute, Christina, Frederieke, Jasper** and **Fleur**. Thank you for your kindness and warm help. I am looking forward to do great science together!

Judith, thank you for handling the monstrous amounts of paperwork for protocols and grants etcetera. You are always on point and on time, with a good dose of humor! What would we do without you?

Uma and **Manjeet**, the best neighbors on earth. Thank you for your love and generosity.

My girls, 'paranimfen' **Jet** and **Miljana**. We go a long way back: the Eureka week, at the very start of medical school. Thank you for sharing loads of joy, warmth, grief and laughter. I am so happy to be nearby you girls again!

Rutger, always listening, always critical. Thank you for being my partner in life.