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Systems biology as a compass to understand cancer-immune interactions in humans

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List of publications

2016

Nuralitha, S., Siregar, J. E., Syafruddin, D., **Roelands, J.**, Verhoef, J., Hoepelman, A. I., and Marzuki, S. (2016) Within-Host Selection of Drug Resistance in a Mouse Model of Repeated Incomplete Malaria Treatment: Comparison between Atovaquone and Pyrimethamine, *Antimicrob Agents Chemother* 60, 258-263.

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Curriculum Vitae

Jessica Paulina Roelands was born on June 9th 1991 in Vlaardingen. She grew up with her parents and younger sister Alissa in Maasland. She graduated from the Revisiuslyceum in Maassluis in 2009, and started with Biomedical Sciences at Leiden University.

Her first experience with cancer research was during her Biomedical Sciences Bachelor's internship at the Department of Surgical Oncology, Leiden University Medical Center (LUMC) supervised by dr. Peter Kuppen and dr. Kees Sier. She studied the potential of Insulin-Like Growth Factor Receptor-1 in colorectal cancer as target for image guided surgery.

After receiving her Bachelor's degree, Jessica performed a research internship of 7 months in Jakarta, Indonesia, focusing on selection of anti-malarial resistant Plasmodium strains. Her work led to co-authorships of two publications and has been awarded by the Leiden University Fund for best international project of the year 2014.

Jessica performed final research internship at the department of Thrombosis and Hemostasis at LUMC in the lab of prof. dr. Henri Versteeg. She focused on the contribution of the cancer-testis antigen Sperm Protein Associated with the Nucleus on the X-chromosome (SPANX) on cancer progression. She received her Master degree in Biomedical Sciences in August 2014.

During and after completion of her studies, Jessica worked as a research assistant at the Center for Human Drug Research in Leiden, where she assisted in the coordination of clinical trials and performed tests on healthy human volunteers, including EEG, sleep recordings, memory tests and balance measurements.

Jessica was actively involved in the initiation of the research collaboration between dr. Peter Kuppen's lab at LUMC and the research groups of dr. Davide Bedognetti and dr. Wouter Hendrickx at Sidra Medicine in Doha, Qatar. In December 2016, she joined Sidra Medicine as a PhD student at the Cancer Research Department. She was enrolled in the PhD program of Leiden University, under supervision of dr. Peter Kuppen and prof. dr. Rob Tollenaar from the department of Surgical Oncology, LUMC. Jessica spearheaded the collaborative research project that specifically focused on the tumor immune microenvironment and immunogenomics of colon cancer.

The work of this PhD project has been presented at the annual meeting of the Society for Immunotherapy of Cancer (SITC). Jessica was awarded the SITC Young Investigator Award in recognition of this work in 2018 and 2019, and received a Poster Prize during the Cancer Immunotherapy Workshop by Hamad Medical Corporation in Doha, Qatar. In addition to her PhD project, Jessica was a participant of the Collective Omics Data (COD) program led by dr. Damien Chaussabel and dr. Darawan Rinchai. In 2019, she was co-instructor of a COD Workshop held at MD Anderson in Houston, Texas, USA.

Since February 2021, Jessica is working as a post-doctoral researcher in the lab of dr. Noel de Miranda. Her work focusses on spatially-resolved transcriptomics in colorectal cancer.

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Appendices

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