On February 1st, 1987, Hellen Houlleberghs was born to Belgian expats in Leidschendam, the Netherlands. Throughout her childhood she lived in several countries from the Sultanate of Oman to the United States of America. At eighteen years old Hellen decided to study Medical Biochemistry (BSc) at King’s College, University of London, the United Kingdom. During the BSc she received a summer studentship grant from the Biochemical Society to work for Dr. Penka Nikolova at the Department of Biochemistry, King’s College. She later also performed her Bachelor’s thesis in this laboratory and received the Gowland Hopkins prize for best research project thesis of the year. In 2008, Hellen graduated with first class marks (cum laude) from King’s College. In that same year, she began the MSc Biomedical Sciences and Management at the University of Leiden, the Netherlands. During the MSc, she performed an internship in Dr. Annemieke Aartsma-Rus’ group at the Department of Human Genetics in the Leiden University Medical Centre. She also interned at SKIM Healthcare Market Research, Rotterdam. Near the end of her studies, Hellen and two fellow students wrote a business plan for a treatment for leukemia and entered it in the New Venture Business-plan competition. They reached the top 20 finalists and were invited to discuss the potential of the company by a healthcare venture capital firm who eventually decided not to pursue the opportunity. In August 2010, Hellen received her Master’s degree. From 2010 to 2016, Hellen worked as a PhD student in the group of Prof. Dr. Hein te Riele at the Netherlands Cancer Institute in Amsterdam. Her PhD focused on the creation of a genetic screen that allows the detection of pathogenic DNA mismatch repair gene variants to help clinicians diagnose and treat Lynch syndrome patients; the specifics of this work have been thoroughly described in the present thesis.

Oligonucleotide-directed mutation screening: a functional test to classify mismatch repair gene variants of uncertain significance

Hellen Houlleberghs