

CURRICULUM VITAE

Personal Details

Nynke Hofstra

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Date of Birth: 19th of June 1981

Nationality: Dutch

Gender: Female

Education

2005-2009 PhD, Oxford University Centre for the Environment, Oxford, England

Title: "Development and evaluation of a European daily high-resolution gridded dataset of surface temperature and precipitation for 1950 - 2006", Daily supervisor: Dr. Mark New

2003-2005 MSc, Wageningen University, Wageningen, the Netherlands

MSc. Environmental Sciences, cum laude.

Major: Environmental Systems Analysis, minor: Air Quality.

2000-2003 BSc, Wageningen University, Wageningen, the Netherlands

BSc. Environmental Sciences. Specialisation: Environmental Systems Analysis

Professional background

- **2010-present** Assistant professor in the Tenure Track, *Environmental Systems Analysis Group, Wageningen University*
- **2008-2010** Assistant professor, *Environmental Systems Analysis Group, Wageningen University*
- **2005-2009** PhD, *Oxford University Centre for the Environment, Oxford, England*

Research experience

The main focus of my work is to apply environmental systems analysis approaches to the field of water and health. With my group we have initiated and are developing the Global Waterborne Pathogen (GloWPa) model that is currently estimating *Cryptosporidium* and Rotavirus emissions to surface water worldwide and should soon be a validated model that estimates concentrations in surface water. We plan to use the model in scenario analyses and also explore opportunities to use the model in microbial risk assessment. Other projects are mostly focussed on global change impacts on waterborne pathogens and disease. Quantification of these impacts are still lacking and we fill this gap with mostly modelling approaches. I aim to contribute to an integrated approach that works towards solving environmental problems and reaching the sustainable development goals.

- **2013-2014** Guest-editor Food Research International for special issue on Climate Change and Food Safety
- **2011-2014** Work package leader for WP9 of the EU funded Veg-i-Trade project
- **2010 – present** PhD Supervision
 - **Cheng Liu** September 2010 – present (defense 8 September 2015)
 - **Muhammad Shahid Iqbal** September 2012 – present
 - **Lucie Vermeulen** January 2013 – present
 - **Majedul Islam** July 2013 – present
- **2005 – 2009** PhD at the Centre for the Environment at Oxford University; worked in an international team on the observational temperature and precipitation dataset (E-OBS) for the EU-funded project ENSEMBLES.

Teaching experience

I have been involved in teaching activities ever since I was a student. First as student assistant, then as tutor teaching climatology to geography students during my PhD, and currently as course coordinator and lecturer in Environmental Systems Analysis courses at Wageningen University. I (re)developed several courses, such as the MSc course Introduction to Global Change, the BSc course International Study Visits for Environmental Science students (who learn how to collaborate with students from Kiev, Ukraine, while learning all about radioactivity and nuclear power) and the course Introduction to Environmental Systems Analysis for 2nd year BSc students around Climate Change Impact Assessment. I obtained my University Teaching Qualification in 2011 and have in the last six years been involved in the Programme Committee for Environmental Sciences.

Acquisition

- 2013 Funding for Lucie Vermeulen's PhD from the Environmental Systems Analysis budget and Climate KIC
- 2013 Bangladeshi government funding for Majedul Islam's sandwich PhD
- 2013 Funding from NWO to organise two workshops to elaborate our proposal for the UDW call
- 2012 NFP funding for Muhammad Shahid Iqbal's sandwich PhD
- 2010 Funding for WP9 of the Veg-i-Trade project on the impacts of climate change on fresh produce safety. Funded one PhD student

Key Publications

My 18 papers have been cited 1,044 times in total. I have two top1% publication (Haylock, Hofstra et al 2008 and Liu et al 2013) and six top10% publications (Web of Science, 25-5-2016). My H-index is 9.

- Hofstra, N., Vermeulen, L.C. (2016) Impacts of population growth, urbanisation and sanitation changes on global human Cryptosporidium emissions to surface water. International Journal of Hygiene and Environmental Health, In Press
- Vermeulen, L.C., de Kraker, J., Hofstra, N., Kroeze, C, Medema, G. (2015) Modelling the impact of sanitation, population growth and urbanization on human emissions of Cryptosporidium to surface waters-a case study for Bangladesh and India. Environmental Research Letters 10(9), 094017
- Vermeulen, L.C., Hofstra, N., Kroeze, C. and Medema, G. (2015) Advancing waterborne pathogen modelling: lessons from global nutrient export models. Current Opinion in Environmental Sustainability 14, 109-120.
- Kiulia, N.M., Hofstra, N., Vermeulen, L.C., Obara, M.A., Medema, G. and Rose, J.B. (2015) Global occurrence and emission of rotaviruses to surface waters. Pathogens 4(2), 229-255.
- Liu, C., Hofstra, N. and Leemans, R. (2015) Preparing suitable climate scenario data to assess impacts on local food safety. Food Research International 68, 31-40.
- Vermeulen, L.C. and Hofstra, N. (2014) Influence of climate variables on the concentration of Escherichia coli in the Rhine, Meuse, and Drentse Aa during 1985-2010. Regional Environmental Change 14(1), 307-319.
- Hofstra, N., Bouwman, A.F., Beusen, A.H.W. and Medema, G.J. (2013) Exploring global Cryptosporidium emissions to surface water. Science of the Total Environment 442, 10-19.
- Hofstra, N. (2011) Quantifying the impact of climate change on enteric waterborne pathogen concentrations in surface water. Current Opinion in Environmental Sustainability 3(6), 471-479.

Other

I frequently present at international conferences and workshops. I regularly review articles for scientific organisations and journals, including Climatic Change, Water Resources and many others.