

Jan Hendrik Richardus

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Summary

I am a Public Health Physician, Epidemiologist, and Professor of Infectious Diseases and Public Health. My experience is in the study of the public health consequences of infectious diseases and evaluating the effectiveness of their control. My current research activities focus on the development and assessment of control strategies using epidemiological methods such as mathematical modelling. I have a special life-long interest in leprosy.

Experience

- 2010-present: **Full Professor.** Department of Public Health, Erasmus MC, University Medical Center Rotterdam (Netherlands)
- 2007: Visiting Professor (sabbatical). Faculty of Medicine, University of Sydney (Australia)
- 2005-2010: **Associate Professor.** Department of Public Health, Erasmus MC, University Medical Center Rotterdam (Netherlands)
- 2005-present: **Head.** Huisman Research Centre for Infectious Diseases and Public Health (Netherlands): research collaboration Erasmus MC and GGD Rotterdam-Rijnmond
- 2005-2010: **Coordinator.** Academic Workplace Public Health Rotterdam-Rijnmond (CEPHIR)
- 2000-present: **Senior Physician/Researcher.** Department of Infectious Disease Control, Municipal Public Health Service (GGD) Rotterdam-Rijnmond (Netherlands)
- 1996-2005: **Senior Researcher.** Department of Public Health, Erasmus MC, University Medical Center Rotterdam (Netherlands)
- 1993-1995: **Country Director.** The Leprosy Mission International, Dhaka (Bangladesh)
- 1990-1992: **Acting Medical Director.** The Leprosy Mission International, McKean Rehabilitation Center in Chiang Mai (Thailand)
- 1986-1989: **Medical Officer.** The Leprosy Mission International, McKean Rehabilitation Center in Chiang Mai (Thailand)
- 1983-1985: **Research Fellow.** Virological Laboratory Municipality Rotterdam (Netherlands)

Awards

1. Top publication Department of Public Health 2020; Theme: Leprosy Post-Exposure Prophylaxis
2. Prof. dr. L. Burema Prijs 2005; Theme: Infectious Disease Control
3. ONVZ Preventie Jaarprijs 2004; Theme: Prevention of Perinatal and Infant Mortality.

Education

- 1999: Registration as Public Health Specialist, Sociaal Geneeskundige Registratie Commissie (SGRC), tak: Maatschappij en Gezondheid, (Netherlands)
- 1996: Registration as Research Epidemiologist (B), Stichting voor Opleiding tot Medisch-Biologisch Wetenschappelijk Onderzoeker (SMBWO), (Netherlands)
- 1986: Certificate Medical Officers Course (Leprosy), Schieffelin Medical Research and Training Centre, Karigiri (India)
- 1986: Diploma Tropical Medicine (DTM), Prince Leopold Institute for Tropical Medicine, Antwerp (Belgium)
- 1986 Bachelor of Arts in Religious Education (BA), International Correspondence Institute, Brussel (Belgium)
- 1985: Doctor of Philosophy (PhD), Technical University Delft (Netherlands)
Title thesis: Q-Koorts in Nederland: Klinische, Epidemiologische en Immunologische Aspecten
- 1983: Medical Doctor (MD), Erasmus University Rotterdam (Netherlands)

Experience

My research activities focus is on infectious disease control, in particular the development and assessment of control strategies using epidemiological methods such as mathematical modelling. I have also performed studies on social and behavioral aspects of prevention of infectious diseases. My special interest is in infectious diseases with a chronic course and long-term complications, e.g. the mycobacterial diseases tuberculosis and leprosy, and viral hepatitis B. Due to my previous work overseas, I have a longstanding experience with leprosy. My areas of expertise are the epidemiology of transmission of *M. leprae* and the prevention of disabilities in leprosy patients. I have supervised a number of randomized clinical trials in Bangladesh of chemoprophylaxis with rifampicin in contacts of leprosy patients and I am member of, or advisor to several international research collaborations in leprosy. With regard to tuberculosis, I have supervised studies on the control of TB in urban high-risk groups, and a national study on the optimization of tuberculosis control in the Netherlands. Our unit was also involved in a study for the European Centre for Disease Prevention and Control (ECDC). My third research topic has been on viral hepatitis B, with focus on the epidemiology of chronic hepatitis B, the identification of high-risk groups (primarily migrants), and the assessment of strategies to prevent new infections and optimize referral and treatment of existing patients with chronic hepatitis B. I have completed an EU-funded project on screening of migrants in EU on viral hepatitis. Since 2013 I have been working on projects for the Bill & Melinda Gates Foundation on Neglected Tropical Diseases (NTDs). We have performed health and socioeconomic impact assessments for a number of NTDs provided that certain control and elimination targets are met. Also, I have been involved in a modelling consortium on NTDs that is sponsored by the Foundation.

Key career contributions

1. **Q-fever in the Netherlands** (early 1980's)

This was the topic of my PhD thesis. I showed through case studies and sero-epidemiological investigations that Q-fever (a zoonosis) is endemic in the Netherlands. Before that time it was considered as non-existent. This insight has had a large impact on policies in the Netherlands (and Europe) with regard to cattle and sheep farming and the risk of acquiring Q-fever by the general population in the Netherlands. These insights were invaluable during the Q-fever outbreak in the Netherlands in 2007, the largest outbreak ever in the world to date.

2. **Epidemiology of nerve damage and disability in leprosy** (1990's)

Disability in leprosy, a consequence of nerve damage due to *Mycobacterium leprae* infection, is the hallmark of leprosy and reason for the huge stigma attached to the disease over the ages. However, little was known about the occurrence of nerve damage and risk factors associated with this complication. Through large prospective cohort studies I have been able to elicit many of these factors, which have led to guidelines and recommendations in the prevention, treatment and management of disabilities in leprosy.

3. **Development of perinatal audit methodology in Europe** (late 1990's)

In the second half of the 1990's, I worked on an EU-funded project in which we developed a methodology to assess and compare in a standardized way perinatal mortality and suboptimal perinatal care in 10 European regions. This was ground-breaking work, which has led to routine perinatal audits in many countries and improvements in perinatal care.

4. **Risk perception, knowledge and precautionary actions in infectious disease control** (early 2000's)

In the wake of the SARS epidemic early 2000's, we applied behavioral and social science to infectious disease control. This had been not been done at a large scale before. This led to a landmark article titled "SARS risk perception, knowledge, precautions, and information sources, in the Netherlands", which was published in the prestigious journal *Emerging Infectious Diseases* in 2004. Since then this area of research, combining behavioral and biomedical sciences, has taken off as an important discipline in infectious disease control. The most notable project was the EU Ecom project on communication during pandemic outbreaks.

5. **Effectivity of chemoprophylaxis in leprosy** (2005-2020)

The single most important tangible contribution of my leprosy-related work is the inclusion of post-exposure prophylaxis with single-dose rifampicin (SDR-PEP) for leprosy contacts into the recent WHO guidelines for global leprosy control. This guideline is primarily based on our study in Bangladesh (COLEP study, published in the *British Medical Journal*). More recently, we completed a multi-country feasibility study on SDR-PEP, which was published in the *Lancet Global Health*.

6. **Mortality due to viral hepatitis in the Netherlands (2015-2017)**

Another notable achievement was determining the number of people who die due to viral hepatitis in the Netherlands. This is difficult to establish, because the primary cause of death is often liver cancer, disguising the underlying hepatitis B or C infection. In the Netherlands mortality is around 500 per year, proving that viral hepatitis is one of the most deadliest diseases in Western countries, a finding that is not well-recognized. This was key to the development of a National Viral Hepatitis Plan by the National Health Institute of the Netherlands.

Research outputs

I have published over 335 international peer-reviewed scientific publications. These can be found through <https://pubmed.ncbi.nlm.nih.gov/?term=richardus%2C+j&sort=date>

I consider the following publications my most important and influential work (see career contribution):

1. **Richardus JH**, Donkers A, Dumas AM, Schaap GJ, Akkermans JP, Huisman J, Valkenburg HA. Q fever in the Netherlands: a sero-epidemiological survey among human population groups from 1968 to 1983. *Epidemiol Infect.* 1987;98(2):211-9.
2. **Richardus JH**, Nicholls PG, Croft RP, Withington SG, Smith WC. Incidence of acute nerve function impairment and reactions in leprosy: a prospective cohort analysis after 5 years of follow-up. *Int J Epidemiol.* 2004;33(2):337-43.
3. Croft RP, Nicholls PG, Steyerberg EW, **Richardus JH**, Cairns W, Smith S. A clinical prediction rule for nerve-function impairment in leprosy patients. *Lancet.* 2000;355(9215):1603-6.
4. **Richardus JH**, Graafmans WC, Verloove-Vanhorick SP, Mackenbach JP. Differences in perinatal mortality and suboptimal care between 10 European regions: results of an international audit. *BJOG.* 2003;110(2):97-105.
5. Brug J, Aro AR, Oenema A, de Zwart O, **Richardus JH**, Bishop GD. SARS risk perception, knowledge, precautions, and information sources, the Netherlands. *Emerg Infect Dis.* 2004;10(8):1486-9.
6. Moet FJ, Pahan D, Oskam L, **Richardus JH**; for the COLEP Study Group. Effectiveness of single dose rifampicin in preventing leprosy in close contacts of patients with newly diagnosed leprosy: cluster randomised controlled trial. *BMJ.* 2008;336:761-764.
7. **Richardus JH**, Tiwari A, Barth-Jaeggi T, Arif MA, Banstola NL, Baskota R, et al. Leprosy post-exposure prophylaxis with single-dose rifampicin (LPEP): an international feasibility programme. *Lancet Glob Health.* 2021;9(1):e81-e90.

Doctorates as co-promotor

1. Chlamydia Screening: whom and how? **Hannelore Götz**, GGD Rotterdam-Rijnmond (2006)
2. Capture-recapture methods in surveillance of tuberculosis and other infectious diseases. **Rob van Hest**, GGD Rotterdam-Rijnmond (2007)
3. Contacts of leprosy patients: occurrence and prevention of the disease. **Hans Moet**, Erasmus MC (2007)
4. Outbreaks: Sources of Epidemiological Knowledge in Communicable Disease Control. **Paul Mertens**, GGD Rotterdam-Rijnmond (2008)
5. Risk Perception and Communication in Infectious Disease Control. **Onno de Zwart**, GGD Rotterdam-Rijnmond (2009)
6. The Application of DNA Fingerprinting for Tuberculosis control in an urban area. **Gerard de Vries**, GGD Rotterdam-Rijnmond (2009)
7. Reducing the burden of leprosy: evaluation of the public health impact of interventions to prevent, detect, and cure nerve function impairment and reactions. **Natasja van Veen**, Erasmus MC (2009)
8. Public Health strategies for identification and referral of patients with Chronic Hepatitis B. **Irene Veldhuijzen**, GGD Rotterdam-Rijnmond (2009)
9. Sero-epidemiological studies of *M. leprae*. **Ron Schuring**, Koninklijk Instituut voor de Tropen (KIT) (2009)
10. Leprosy transmission: predicting the impact of interventions in contacts. **Egil Fischer**, Erasmus MC (2010)
11. Emerging Tick-borne Infections: Epidemiological Studies in China. **Wuchun Cao**, Beijing Institute for Microbiology and Epidemiology (2010)

Doctorates as promotor (completed)

12. The burden of Chronic Hepatitis B and antiviral resistance in high prevalent migrant populations in the Netherlands. **Mehlika Toy**, Erasmus MC (2011)
13. Improving Tuberculosis case finding in Indonesia. **Riris Andono Ahmad**, Erasmus MC (2011)
14. Cultural tailoring for the promotion of Hepatitis B-screening in Turkish migrants. **Ytje van der Veen**, Erasmus MC (2012)
15. Leprosy and Social Environment. **Sabiena Feenstra**, Erasmus MC. (2013)
16. The impact of antiretroviral therapy on the HIV epidemic in South Africa. **Jan Hontelez**, Erasmus MC (2013)
17. Finding ways to promote STI testing among the Afro-Caribbean community in the Netherlands. **Alvin Westmaas**, Maastricht University / Erasmus MC (2013)
18. The health impact of Onchocerciasis control in Africa. **Luc Coffeng**, Erasmus MC (2013)
19. Outbreaks of emerging infectious diseases: risk perception and behaviour of the general public. **Marloes Bults**, Erasmus MC (2014)

20. Occupational Hazards, Public Health Risks. Sex work and sexually transmitted infections, their epidemiological liaisons and disease control challenges. **Richard Steen**, Erasmus MC (2014)
21. Risk Factors and Interventions for HIV Control in China. **Cai Rui**, Erasmus MC (2014)
22. Infection Control in Child Day Care Centres. **Tizza Zomer**, Erasmus MC (2015)
23. Behavioral Aspects of HIV Prevention in China. **Liu Xiaona**, Erasmus MC (2015)
24. Clinical Perspective on the Vaginal Microbiome. **Joke Dols**, VUMC Amsterdam (2016)
25. Risk factors, early detection and treatment of Neuropathy in Leprosy. **Inge Wagenaar**, Erasmus MC (2016)
26. Visceral Leishmaniasis; potential for control and elimination. **Epke Le Rütte**, Erasmus MC (2018)
27. Towards the elimination of viral hepatitis in Europe. **Abby Falla**, Erasmus MC (2018)
28. Introducing Systems Approaches in Health Behavioral Research. **David Blok**, Erasmus MC (2018)
29. Behavioral HIV-prevention interventions for men who have sex with men and transgender women in Indonesia. A community-based participatory study. **Adi Nugroho**, Erasmus MC (2019)
30. Timeliness of infectious disease notification & response systems. **Corien Swaan**, Erasmus MC/GGD/RIVM (2019)
31. Tuberculosis-related Catastrophic Costs since the Implementation of Universal Health Coverage in Indonesia. **Ahmad Fuady**, Erasmus MC (2020)
32. New Tuberculosis Vaccine Trials in Infants: design, diagnostics and trial site development. **Grace Kiringa Kaguthi**, Erasmus MC (2020)
33. Leprosy Post-Exposure Prophylaxis with Single-dose Rifampicin. Health economic aspects in India. **Anuj Tiwari**, Erasmus MC (2020)

Doctorates as promotor (ongoing)

34. Improving Hand Hygiene compliance in Nursing Homes. **Gwen Teesing**, Erasmus MC/MPHS
35. Leprosy Perception Interventions. **Anna van 't Noordeinde**, Erasmus MC/NLR
36. Prescription Antibiotics in Primary Care. **Dominique Lescure**, Erasmus MC/MPHS
37. SOA/HIV in Rotterdam, **Denise Twisk**, Erasmus MC/MPHS
38. Leprosy Spatial Epidemiology. **Anneke Taal**, Erasmus MC/NLR
39. Yaws in The Philippines, **Belen Dofitas**, Erasmus MC
40. Post-exposure Prophylaxis in Leprosy. **Nimer Ortuna**, Erasmus MC/Antwerp Tropical Institute
41. Detection Delay in Leprosy. **Yudhy Dharmawan**, Erasmus MC/Indonesia
42. E-health Applications Leprosy. **Ulfah Abqari**, Erasmus MC/Indonesia
43. Leprosy in Mozambique. **Abdoulaye Marega**, Erasmus MC/Mozambique
44. Post-exposure Prophylaxis Leprosy. **Thomas Hambridge**, Erasmus MC
45. TB in India. **Anand Meundi**, Erasmus MC

Research funding (ongoing)

- Monitoring the effect of prophylactic interventions in contacts of leprosy patients including field-application of a novel immune-diagnostic test in Bangladesh (INDIGO). Funded by the Leprosy Research Initiative and The Leprosy Mission International (€650,000) Role: Applicant and PI (2019-2021)
- Chemoprophylaxis for leprosy: comparing the effectiveness and feasibility of a skin camp intervention to a health centre based intervention. An implementation trial in Mozambique, Ethiopia and Tanzania (PEP4LEP). Funded by EDCTP through Netherlands Leprosy Relief (€500,000). Role: Co-PI (2018-2023)
- Stop the Transmission of Leprosy (PEP++). Funded by Netherlands Leprosy Relief (€500,000). Role: Co-PI (2018-2022)
- Prescription of antibiotics in primary care; a focus on immigrant communities in Rotterdam (PARCA). Funded by ZonMw (€500,000). Role: Applicant and PI (2018-2021)
- Innovations in improving hand hygiene in long term care facilities. Funded by ZonMw (€500,000). Role: Applicant and PI (2015-2020)

Research funding (completed)

- Leprosy elimination investment case and mathematical modelling study. Funded by Novartis Foundation (€350,000). Role: Applicant and PI (2017-2019)
- Identification of human susceptibility genes and pathogen-based transmission patterns for human and environmental sources of *M. leprae* in a leprosy endemic area in Bangladesh. Funded by R2STOP Canada (€250,000). Role Co-applicant and Co-PI (2017-2019)
- Field evaluation of novel immunodiagnostic tools for early detection of leprosy in a BCG vaccination field trial amongst contacts of leprosy patients. Funded by the Leprosy Research Initiative (€1,825,000) Role: Applicant and PI (2015-2018)
- Leprosy Post-Exposure Prophylaxis (LPEP): Evaluating Feasibility and Impact on Leprosy Incidence. Funded by Novartis Foundation (€500,000). Role: Applicant and PI (2014-2019)
- Awareness Identification and Treatment Chronic hepatitis B and C: BIBHEP. Funded by ZonMw and a consortium of other funders (€300,000). Role: Co-applicant and Co-PI (2014-2017)
- Assessment of introducing programmatic latent TB control in the European Union and candidate countries. Funded by European Centre for Disease Prevention and Control (€140,000). Role: Co-applicant and co-PI (2015-2017)
- NTD (Neglected Tropical Diseases) Modelling Consortium. Funded by the Bill & Melinda Gates Foundation (€1,800,000). Role: Co-applicant and co-PI (2015-2017)
- Modeling and Impact Assessment for London Declaration Diseases. Funded by the Bill & Melinda Gates Foundation (US\$1,800,000). Role: PI (2013-2015)
- Effective Communication in Outbreak Management: development of an evidence-based tool for Europe (E-com@eu). EU funded under FP7 (€2,000,000). Role: Applicant, PI and coordinator of the consortium (2011-2015)

- Application of immunodiagnostic tools for early detection of leprosy in the field; phase I & II: continuation of sample collection for biobanking (I) and start analysis of immune- and genetic host markers (II). Funded by Netherlands Leprosy Relief (€284,000). Role: Applicant and PI (2014)
- The combined effect of chemoprophylaxis with rifampicin and immunoprophylaxis with BCG, in the prevention of leprosy in contacts: a randomized controlled trial. Funded by MALTALEP (€200,000). Role: Applicant and PI (2011-2014)
- Application of immunodiagnostic tools for early detection of leprosy in the field; phase I: continuation of sample collection for biobanking (IDEAL). Funded by Netherlands Leprosy Relief (€178,000). Role: Applicant and PI (2013)
- Verspreiding en implementatie Impuls Heel gewoon Handen schoon. Funded by ZonMw (€50,000). Role: applicant and PI (2013-2014)
- Evaluatie en implementatie van een Hepatitis B and C educatie en screenings programma voor de Chinese gemeenschap in Nederland. Funded by ZonMw (€30,000). Role: applicant and PI (2013-2014)
- Screening for Hepatitis B and C among migrants in the European Union (EU-HEP-SCREEN). EU funded by DG Sanco (€1,200,000). Role: Applicant, PI and coordinator of the consortium (2011-2014)
- Application of immunodiagnostic tools for early detection of leprosy in the field; phase I: sample collection for biobanking (IDEAL). Funded by Netherlands Leprosy Relief (€178,000). Role: Applicant and PI (2012)
- Improving compliance to hand hygiene guidelines in child care centres; a stepwise behavioural intervention development and evaluation. Funded by ZonMw (€ 480,000). Role: applicant and PI. (2009-2013)
- MRSA of Unknown Origin: Risk assessment and adjustment of risk classification. Funded by ZonMw (€500,000). Role: Co-PI. (2009-2013)
- Optimization of tuberculosis control in the Netherlands: an integrated view on cost-effective strategies, with scenarios for technological, organizational, and epidemiological developments. Funded by ZonMw (€625,000). Role: applicant, PI and chairman of the collaboration. (2008-2013)
- Epidemiological investigations on avian influenza in mainland China. Funded by the National Natural Science Foundation of China (€250,000). Role: Co-PI (2009-2011)
- Impact of preventive interventions on the transmission of *M. leprae*. Funded by Netherlands Leprosy Relief and German Leprosy Relief (€78,000). Role: applicant and PI. (2010)
- A comprehensive modelling framework for the evaluation of preventive and individualised therapeutic interventions in Chronic Hepatitis B in the Netherlands and China (HBVSIM). Funded by MGZ (€140,000). Role: applicant and PI (2009-2010)
- Identifying sources of transmission routes of norovirus outbreaks by molecular epidemiological methods as the basis for targeted prevention strategies. Funded by ZonMw (€550,000). Role: Co-PI. (2008-2010)
- Incidence and risk of leprosy in high and low risk groups in an endemic population. Funded by Netherlands Leprosy Relief and German Leprosy Relief (€210,000). Role: applicant and PI. (2008-2009)

- Promotion of prevention of hepatitis B in the Turkish community in Rotterdam: Individual and cultural tailoring in infectious diseases control. Funded by ZonMw (€235,000). Role: applicant and PI. (2006-2010)
- Early Diagnostic and Epidemiological Assays for Leprosy (EDEAL). Funded by Netherlands Leprosy Relief and Turing Foundation ((€600,000). Role: co-applicant and PI (2008-2010)
- Effectivity of the MRSA prevention policy of Erasmus MC. Funded by Erasmus MC (€200,000). Role: applicant and PI. (2005-2009)
- A prospective (sero-)epidemiological study on contact transmission and chemo-prophylaxis in leprosy (COLEP). Funded by American Leprosy Missions and The Leprosy Mission International (US\$ 1 million). Role: applicant and PI. (2001-2008)
- Leprosy transmission: predicting the impact of interventions in contacts (SIMCOLEP). Funded by Netherlands Leprosy Relief (€275,000). Role: applicant and PI. (2004-2007)
- Reducing the burden of leprosy: evaluation of the public health impact of interventions to prevent, detect and cure nerve function impairment and reactions (AsPOD). Funded by Netherlands Leprosy Relief (€275,000). Role: applicant and PI. (2004-2008)
- Effective and acceptable strategies for the control of SARS and new emerging infections in China and Europe (SARSControl). Funded by EU, FP6 (€2.5 million). Role: applicant, PI and consortium co-ordinator. (2005-2007)
- Initiative for Diagnostic and Epidemiological Assays for Leprosy (IDEAL). Funded by the Heiser Foundation (USA)(US\$400,000). Role: Co-applicant and PI. (2005-2008)
- Genotyping as new instrument in the control of hepatitis B in Rotterdam through insight in transmission within en between population groups. Funded by Fonds OGZ (€165.000). Role: applicant and PI. (2003-2005)
- National prevalence and intervention (screening) study of Chlamydia trachomatis in the Netherlands. Funded by ZonMW (Fl.900.000) Role: CoPI. (2000-2004)
- Counselling of chronic hepatitis B virus (HBV) carriers: development of an evidence-based protocol for public health nurses. Funded by Maag Lever Darm Stichting (€95.000). Role: applicant and PI. (2004-2006)
- Oud Charlois gaat voor gezond! Wijkcohort Infectieziekten. Funded by GlaxoSmithKline (€100,000). Role applicant and PI. (2005-2006)
- Malaria in West African immigrants in the Netherlands after visiting their country of origin: Reasons for insufficient use of malaria prophylaxis and other preventive measures. Funded by ZonMw and Erasmus Trust Fonds (Fl.340.000). Role: applicant and PI. (2001-2003)
- Implementation and evaluation of a referral guideline for chronic hepatitis B patients from primary to specialist care. Funded by VAZ Doelmatigheidsonderzoek (Fl.225.000). Role: applicant and PI. (2001-2003)
- Sero-prevalence study of hepatitis A-antibodies in Turkish, Moroccan and Dutch children (aged <16 jaar) in Rotterdam. Funded by GlaxoSmithKline and Theia Foundation (Fl.200.000). Role: applicant and PI. (2000-2002)
- Development of a simulation model for evaluation and prediction of epidemiological trends in leprosy programmes (SIMLEP). Funded by Netherlands Leprosy Relief (Fl.350.000). Role: CoPI. (1996-2002)

- Trials of Prevention of Disability (TRIPOD). Funded by LEPRA and TLMI (UK£100,000). Role: Co-PI (1996-2002)
- Bangladesh Acute Nerve Damage Study (BANDS). Funded by The Leprosy Mission International (UK£50,000). Role: applicant and PI. (1995-2002)

Vaccine trials

The following vaccine trials have been conducted by the Trial Unit of the GGD (MPHS) Rotterdam-Rijnmond under my supervision as principal investigator:

- A double-blind, randomized, controlled study to evaluate the immunogenicity and safety of GlaxoSmithKline Biologicals' herpes simplex candidate vaccine (gD2-AS04) in healthy HSV seropositive female subjects aged 10 - 17 years: GlaxoSmithKline (GSK). (2004-2007)
- A phase III, double-blind, randomized study to assess the consistency of the immunogenicity of three consecutive production lots of GlaxoSmithKline Biologicals' HPV-16/18 VPL/AS04 vaccine administered intramuscularly according to a 0, 1, 6-month schedule in healthy female subjects aged 10-25 years and to demonstrate the non-inferiority of the Hi5 formulation of the candidate HPV vaccine versus the Hi5/SF9 vaccine formulation: GlaxoSmithKline (GSK). (2004-2005)
- A phase III, observer blind, randomised study to evaluate the safety and immunogenicity of one and two administrations of pandemic monovalent (H5N1) influenza vaccine (split virus formulation containing 15 ug HA and adjuvanted with AS03) in adults aged 18 years and older. (2006-2007)
- A phase II, single-blind, randomized, controlled, multicentre vaccination study to evaluate the safety and immune response of the GSK Biologicals' Zoster vaccine, gE/AS01B, and to compare 3 doses of gE with AS01B adjuvant in healthy elderly subjects, aged 60 to 69 and 70 years and above. (2007-2009)
- A phase II, observer-blind, multicountry, multicentre, randomized study to evaluate the immunogenicity, safety and reactogenicity of the GlaxoSmithKline Biologicals' influenza vaccine adjuvanted with various doses of the oil in water emulsion and MPL, administered in adults aged 65 years and older, and compared to Fluarix. (2007-2008)
- A phase III, observer-blind, multicountry, multicentre study to evaluate the safety, reactogenicity and immunogenicity of GlaxoSmithKline Biologicals' GSK 2186877A influenza vaccine administered to adults aged 65 years and older compared to FluarixTM administered to adults aged 18-41 years and 65 years and older, who previously participated in the 110874 study. (2008-2009)
- A phase III, observer-blind, multicountry, multicentre study to evaluate the safety, reactogenicity and immunogenicity of GlaxoSmithKline Biologicals' GSK 2186877A influenza vaccine administered to adults aged 66 years and older compared to FluarixTM administered to adults aged 19-43 years and 66 years and older, who previously participated in the 11737 study. (2009-2010)
- Randomized, observer-blind, active-controlled phase III study to demonstrate the superior efficacy of GlaxoSmithKline Biologicals' adjuvanted influenza candidate vaccine [GSK2186877A], administered intramuscularly in elderly aged 65 years or above, as compared to FluarixTM. (2008-2011)

- A phase IIIb, open, controlled study to evaluate the immunogenicity and safety of GlaxoSmithKline Biologicals' HPV-16/18 L1 VLP AS04 vaccine (Cervarix™) co-administrated with GlaxoSmithKline Biologicals' Hepatitis B vaccine (Engerix™) in healthy female subjects aged 9-15 years. (2008-2009)
- A phase IV, open label, randomized, multicountry study to evaluate immunogenicity and safety of GlaxoSmithKline Biologicals' seasonal (201-2011) influenza vaccine Fluarix™ in children previously vaccinated with GSK Biologicals' H1N1 vaccine (Pandemrix™). (2010-2011)
- An open, phase II long term extension study to evaluate the immune responses to and safety of GSK Biocigals' candidate herpes zoster vaccine, (gE/AS01B), at months 48, 60 and 72 post-vaccination in healthy subjects aged 60 years of age and older (2011-2013).

Scientific Networks

I have been the scientific coordinator and/or co-investigator of the following scientific networks and consortia:

- Effective Communication in Outbreak Management: development of an evidence-based tool for Europe (E-com@eu). EU funded (FP7). Role: Applicant, PI and coordinator of the consortium. 2011-2015
- Screening for Hepatitis B and C among migrants in the European Union (EU-HEP-SCREEN). EU funded (DG Sanco). Role: Applicant, PI and coordinator of the consortium. 2011-2014
- Treatment of Early Neuropathy in Leprosy (TENLEP) Funded by a consortium of ILEP members, including Netherlands Leprosy Relief. Role: member International Steering Committee and PhD supervisor. 2010-2014
- Effective and Acceptable Strategies for the Control of SARS and new emerging infections in China and Europe (SARSControl). EU funded (FP6). Role: Applicant, PI and chairman of this Chinese-European collaboration. 2005-2008
- Initiative for Diagnostic and Epidemiological Assays for Leprosy (IDEAL). Funded by the Heiser Foundation (USA), Netherlands Leprosy Relief and Turing Foundation (NL). Role: Co-applicant, PI and chairman of the Steering Committee of the Consortium. 2005-2010
- Centres of excellence for Tuberculosis/HIV – Strengthening institutional training and research capacity. Funded by EU (Asia-Link Programme). Role: Co-investigator. 2004-2007
- Perinatal Mortality in Europe: an outcome indicator for the quality of antenatal and perinatal care? (EuroNatal). EU funded (FP5). Role: Co-investigator and coordinator of European collaboration. 1996-2000
- Centre for Effective Public Health in Rotterdam (CEPHIR). Funded by the ZonMw programme 'Academic Collaboration Centres for Public Health 2004-2008'. CEPHIR is a collaboration between the Department of Public Health of Erasmus MC and the GGD (MPHS) Rotterdam-Rijnmond. Role: Coordinator and co-investigator. 2005-2010

Educational activities

My main teaching involvement for the medical curriculum of Erasmus MC in has been with the themes Infection and Immunology and Public Health. I have given plenary lectures on 'Prevention of Infections' and 'Development of Vaccinations'. For these themes I have also developed self-study assignments and I have led community projects for the theme Public Health. Furthermore, I have supervised the STOLA course in Tropical Medicine and Global Health for medical students, and have contributed to the minor Global Health through lectures on the global burden of disease and leprosy.

Medical curriculum Erasmus MC:

- Theme The doctor: General lecture 'Influenza and Society'
- Theme Infection and immunology: General lecture 'Prevention of Infections'
- Theme Infection and immunology: General lecture 'Development of Vaccinations'
- Theme The Population as Patient: Working group 'Global Health'
- Theme Public Health (Arts en Volksgezondheid): Community Projects
- Development of self-study assignments:
 - o Prevention of Tuberculosis
 - o Prevention of Hepatitis B
 - o Global Burden of Disease
 - o Serious game infectious disease control
- Elective education in Tropical Medicine (STOLA): Educational responsibility for this course including the provision of lectures and supervision of written assignments
- Regular supervision of elective research projects of medical students
- Practical (senior co-schap) Public Health for senior medical students
- Minor International Health & Tropical Medicine: Lectures on the 'Global Burden of Disease'

Post-doctoral courses:

- Lecturing in courses of the Netherlands Institute of Health Sciences (NIHES) and the Netherlands School of Public Health (NSPH):
 - o Quantitative Methods for the Evaluation of Tropical Disease Control
 - o Maternal and Child Health
 - o Health of Populations in the Western World
 - o Applied Research in Infectious Disease Practice
 - o Major Diseases & Determinants
 - o Public Health in Low and Middle Income Countries
- Supervision thesis of MSc and MPH students: app. 35 completed

Membership scientific committees and boards

Present:

- Board of Trustees KNCV Tuberculosis Foundation
- WHO Technical Advisory Group Leprosy (New Delhi)
- Academische Raad Opleidingsinstituut Internationale Gezondheidszorg en Tropengeneeskunde
- Bestuur Nationale Academische Werkplaats Medische Milieukunde
- The Leprosy Mission International Research Committee
- Netherlands Leprosy Expertise Center
- Steering Group PEP++ Project, Stop the transmission of leprosy
- Bestuur Q.M. Gastmann-Wichers Stichting
- Editorial Board Leprosy Review (London)

Past:

- Steering Committee National Hepatitis Plan (VWS/RIVM)
- Programme Committee Rotterdam Global Health Initiative (RGHI)
- Programmacommissie Infectieziektebestrijding, NSPOH Opleiding Infectieziektebestrijding
- Scientific Advisory Board, Leonard Wood Memorial Hospital, Cebu, Philippines (chair)
- IDEAL consortium (Initiative for Diagnostic and Epidemiological Assays for Leprosy) (chair)
- Werkgroep 'Lepra in Nederland'
- Steering Group TENLEP (Prevention of Disability in Leprosy)
- Steering Group Leprosy Post-exposure program (LPEP)
- Steering Group ILEP Research Strategy
- Commissie Onderzoek, Sectie Infectieziektebestrijding, Vereniging voor Infectieziekten (chair)
- Toekomstgericht Onderzoekplatform Infectieziekten (TOPIZ), ZonMW en NWO
- Coördinatorenoverleg Academische Werkplaatsen Publieke Gezondheid, ZonMw
- Editorial Board Infectieziekten Bulletin

Book Chapters Leprosy

1. **Richardus JH**, Kar HK, Pereira ZBS, van Brakel WH. Leprosy. Harrison's Principles of Internal Medicine. 21st Edition. Chapter 174. (in press)
2. **Richardus JH**, Ignotti E, Smith WCS. Epidemiology of Leprosy. International Textbook of Leprosy. <http://www.internationaltextbookofleprosy.org/chapter/epidemiology-leprosy>
3. **Richardus JH**, Pahan D, Johnson RC, Smith WCS. Leprosy Control. International Textbook of Leprosy. <http://www.internationaltextbookofleprosy.org/chapter/leprosy-control>

Book Chapters Public Health Netherlands

4. **Richardus JH**, Timen A. Principes van infectieziektebestrijding. In: Leerboek Volksgezondheid. Hoofdstuk 5. 9e geheel herziene druk. Redactie: A. Burdorf en K Stronks. Springer Media, 2021 (in press) Including Online Hoofdstuk Infectieziektebestrijding.
5. Middelkoop BJC, **Richardus JH**, Verhoeff AP. Uitvoering en organisatie van de publieke gezondheidszorg. 8e geheel herziene druk. Springer Media, 2016.
<http://www.springer.com/us/book/9789036813198#>
6. Middelkoop BJC, **Richardus JH**. Uitvoering en organisatie van de publieke gezondheidszorg. In: Volksgezondheid en gezondheidszorg. Redactie: JP Mackenbach en K Stronks. 6e geheel herziene druk. Reed Business, Amsterdam 2013.

Dutch peer-reviewed publications (not in Pubmed)

1. Hofman R, Schalm S, Richardus JH. Sterfte aan chronische virale hepatitis B- en C-infectie naar leeftijd en regio. Infectieziekten Bulletin 2017;28:152-7.
2. Schalm SW, Richardus JH, van Driel T. Nationaal MDL-geïnitieerd programma voor substantiële gezondheidswinst. Magma 2013; 19(4):132-33.
3. Bults M, Beaujean DJMA, Richardus JH, Van Steenberghe JE, Voeten HACM. Ouderlijke besluitvorming om kinderen in 2009 al dan niet te laten vaccineren tegen Mexicaanse griep. Podium voor Bio-ethiek. 2013;20(1):17-20.
4. Zomer TP, Erasmus V, Richardus JH, Voeten HACM. Heel gewoon, handen schoon verbetering handhygiëne op kinderdagverblijven. Infectieziekten Bulletin. 2013;24(8):227-8.
5. Richardus JH. Import van Infectieziekten uit Oost-Europa. Ned Tijdschr Geneeskd 2013; 157(18):846-50.
6. De Vries G, Kidgell-Koppelaar I, Verdier J, Van Hest NAH, Richardus JH. Evaluatie contactonderzoeken in de regio Rijnmond, 2001-2006. Tegen de Tuberculose 2012;108(2):3-7.
7. Tjon-A-Tsien AML, Schop WA, Richardus JH. Antibioticaresistentie: volksgezondheidsprobleem, dus ook GGD-probleem? Inf Bull 2012; 23(3):80-81.
8. Richardus JH. Eliminatie van lepra: de wens is de vader van de gedachte. Inf Bull 2012; 23(5):139-42.
9. Schop WA, Trompenaars M, Tjon-A-Tsien, Lavooij P, Richardus JH. De GGD bestrijding van resistente bacteriën: de Klebsiella Oxa-48-uitbraak in het Maasstad Ziekenhuis in Rotterdam in 2011. Inf Bull 2012; 23(3):77-79.

10. De Man RA, van Driel HF, Vossen A, Richardus JH. Determinanten van de aanwezigheid van hepatitis-A-antistoffen onder verpleegkundigen werkzaam op een endoscopie-afdeling; implicaties voor HAV-vaccinatiebeleid in de zorg. *Ned Tijdschr Med Microbiol.* 2011;19:10-13.
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13. Richardus JH, Akkermans JPWM. Q-koorts al langer aanwezig in Nederland. *Tijdschr Diergeneeskd.* 2010;135:373-4.
14. Kreuger FAF, Voorham AJJ, van der Veen A, Richardus JH. Kortdurende onderzoeksprojecten 'Klein maar Fijn'. *TSG*, 2010;88:
15. Erasmus V, van Eijssden AM, Daha TJ, Richardus JH, van Empelen P, Oenema A, Brug J, Vos MC, van Beeck EF. Handhygiëne in Nederlandse ziekenhuizen: een kwestie van gewoonte? *Tijdschrift Hygiëne en Infectie Preventie* 2009;3:51-53.
16. Richardus JH. Infectieziekten en GHOR: een schoen die past? *TSG.* 2009;87:287-290.
17. Wolfers M, Richardus JH, de Zwart O. "RoSafe": SOA preventie op het ROC. Een onderzoeksproject binnen de Academische Werkplaats Rotterdam-Rijnmond. *TSG.* 2008;86:278-9.
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20. Richardus JH. CEPHIR: de Academische Werkplaats Publieke Gezondheid in de regio Rotterdam. *TSG.* 2006;84:201-203.
21. Richardus JH, Brug J, Donker MCH, Mackenbach JP. Naar evidence-based gezondheidsbevordering; De academische werkplaats Openbare Gezondheidszorg in Rotterdam. *TSG.* 2005;83:172-5.
22. Vos D, Richardus JH. Het ontstaan van het Rijksvaccinatieprogramma; deel 1: De vroege jaren van vaccinatie in Nederland: 1823-1949. *Inf Bull.* 2004;15:13-17.
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24. Richardus JH, Petersen LT, Knoppers WJ, Cobelens FGJ, Dolmans WMV. Preventief medisch onderzoek bij asielzoekers in Nederland. *Inf Bull.* 2002;13:207-214.
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6. Richardus JH, Swart W, Vos D, de Zwart, O. Gezondheidskaart Infectieziekten. GGD Rotterdam e.o. Rotterdam 2000.
7. Croft RP, Nicholls P, Richardus JH, Smith WCS. Tratamiento del deterioro agudo de la función neural en la lepra: Resultado de un estudio prospectivo de cohorte en Bangladesh. *Revista de Lepralogía - FONTILLES* 2000;XXII (5):463-480.
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11. Richardus JH. Q-koorts in Nederland: klinische, epidemiologische en immunologische aspecten. Thesis. Delft 1985.