

1 Infectious Diseases

Infectious diseases have inspired numerous researchers to study how our immune system deals with the many pathogens that attack our body. Shown here is a selection of Dutch scientists that have significantly contributed to a better understanding of an infection by a particular pathogen or the ensuing immune response against it.

Influenza

Ron Fouchier
Ab Osterhaus
Guus Rimmelzwaan

HPV

Chris Meijer
Kees Melief

HIV

Ben Berkhout
Debbie van Baarle
Ralph Van Furth
Theo Geijtenbeek
Jaap Goudsmit
Ronald De Groot
Menno de Jong
Yvette van Kooyk
Taco Kuijpers
Joep Lange
Jos van der Meer
Frank Miedema
Hanneke Schuitemaker

RSV

Grada van Bleek
Louis Bont

CMV/EBV

Debbie van Baarle
Ineke ten Berge
Cathrien Bruggeman
Taco Kuijpers
Rene van Lier
Maaïke Rensing
Hauw The

Candida

Bart-Jan Kullberg
Mihai Netea
Jos van der Meer
Taco Kuijpers

Plasmodium

Robert Sauerwein
Wijnand Eling
Chris Janse

Trypanosomes

Piet Borst

Streptococcus

Ralph Van Furth
Peter Hermans
Tom van der Poll
Ger Rijkers
Jan Verhoef

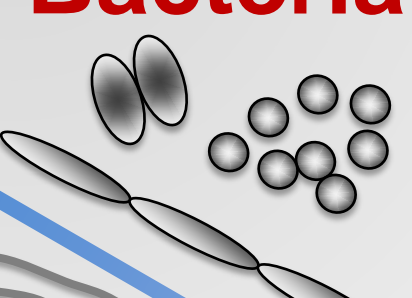
Salmonella

Ralph Van Furth
Marieke van Ham
Tom Ottenhoff

Sepsis

Wim Buurman
Marcel van Deuren
Sander van Deventer
Ronald De Groot
Eric Hack
Jos van der Meer
Mihai Netea
Peter Picckers
Tom vd Poll
Jan Verhoef

Bacteria



Fungi & Parasites

Aspergillus

Irma Bakker-Woudenberg
Taco Kuijpers
Mihai Netea
Paul Verweij

Schistosoma

Andre Deelder
Irma van Die
Maria Yazdanbakhsh

Helicobacter

Ben Appelmek
Ernst Kuipers

Bordetella

Ralph Van Furth
Frits Mooij

Staphylococcus

Irma Bakker-Woudenberg
Ralph Van Furth
Jos van Strijp
Henri Verbrugh
Jan Verhoef

Neisseria

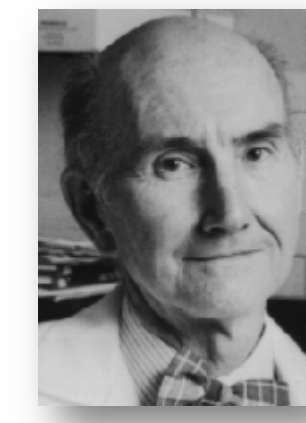
Marcel van Deuren
Ronald De Groot
Jos van der Meer
Jos van Putten

Mycobacterium

Irma Bakker-Woudenberg
Reinout van Crevel
Pran Das
Jaap Van Dissel
Willem van Eden
Mihai Netea
Tom Ottenhoff
Tom van der Poll
Esther van de Vosse
Rene de Vries

2 Dutchies abroad

Many Dutch immunologists have spent shorter or longer periods in laboratories abroad, as postdoctoral fellows, or during collaborative projects. On several occasions this has resulted in a permanent career in a foreign country. Here are a few examples of Dutch colleagues who made themselves successful careers abroad.



Peter Elsbach

Em. Prof. Microbiology, New York University, USA
Natural anti-bacterial host defence



Edith Janssen

Assistant Prof. Cincinnati Children's Hosp MC, USA
T cells and DC in anti-tumor & anti-viral defence



Martin Kast

Prof. Mol. Microbiol & Immunol, Keck School of Med, UCLA, USA
Tumor immunity & therapy



Rob Kastelein

Senior scientist, Merck Research labs, Philadelphia
Interleukins & antagonists as therapeutics



Jean Pieters

Prof., Biozentrum of Basel University, Zwitserland
Coronins (patho)physiology



Hidde Ploegh

Whitehead Institute, Prof. of Biology, MIT, Boston, USA
Viral immune evasion, its elements, and preventive strategies



Ton Rolink

Prof. of Immunology, Basel University, Zwitserland
Common precursors of T, B & myeloid cells. Regulatory T cells



Leonie Taams

Reader in Immunobiology, King's College London, UK
Regulation of (arthritis) inflammation by T cell subsets



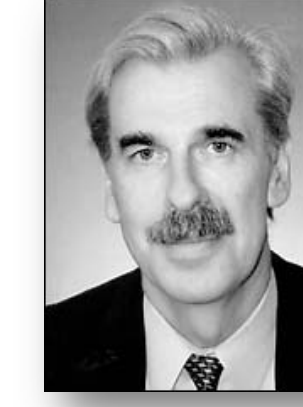
Cox Terhorst

Prof., Beth Israel-Deaconess MC, Boston, USA
CD3 complex. XLP syndrome gene function.



Jeanette Thorbecke († 2001)

Prof. of Pathology, New York Univ School of Medicine, USA;
Germinal center function. IgD immunobiology.



Jan de Vries

Board of Directors AIMM Therapeutics, after >25 years abroad in biotech & immunotherapy R & D.



René de Waal Malefijt

Schering-Plough Biopharma / DNAX Research Institute, Ca, USA.

3 Allergy

Allergy is the exaggerated (immune) response to a harmless antigen. Such responses can be very strong and sometimes even life threatening. Research in allergy has a long history in the Netherlands; shown here are several Dutch researchers that have made major contribution in allergy research.



1922-33: Dutch pioneering work, Willem Storm van Leeuwen
hypersensitivity to house dust & other allergens



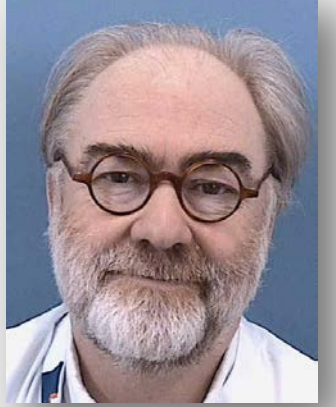
1962-67 Reindert Voorhorst, Frits Spieksma, Marise Spieksma-Boezeman
House dust mites as major source of allergens



Rob Aalberse
Allergen characterization; clinical applications



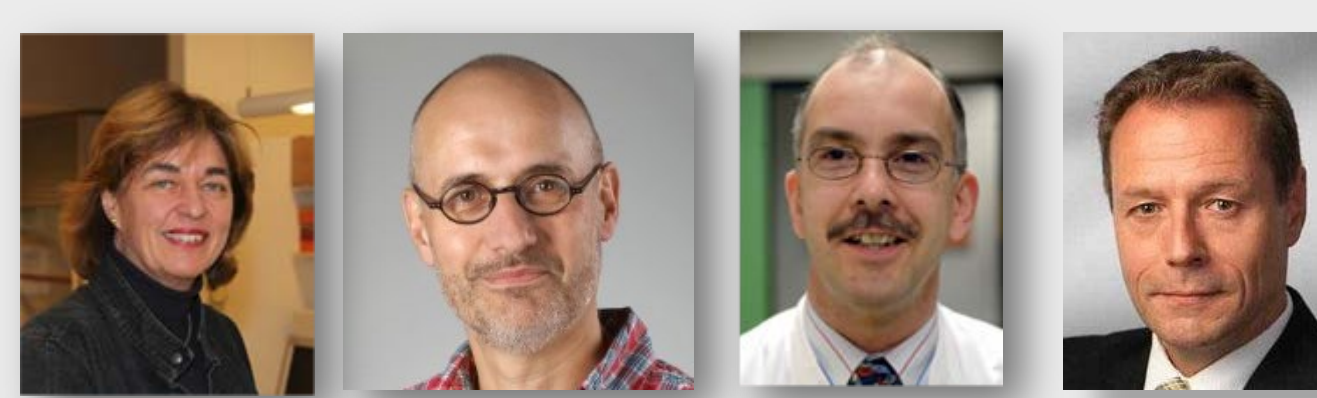
Ronald van Ree
Allergen standardization



Jan de Monchy
Eosinophil influx in late-phase asthmatic reactions



Leo Koenderman
Eosinophilic chemotaxis



Carla Bruijnzeel, Edward Knol, André Knulst, Geert Mudde
T cell subsets and Langerhans cells in chronic allergic skin disease; IgE specificity for allergen components)



Maria Yazdanbakhsh
Role of dendritic cells (DC) in Th1/2 polarization by helminths



Dirk Roos, Maria Yazdanbakhsh
Mechanisms of parasite destruction



Henk Kauffman
activation of lung epithelium by allergens



Bart Lambrecht
pulmonary DC subsets regulate inflammation



Martien Kapsenberg, Esther de Jong, Eddy Wieringa
Role of dendritic cells in human Th1/2 polarization by microbes and in allergy



Machteld Tiemesse, Joost van Neerven
Immunomodulators in fresh milk



Huib Savelkoul, Herman Neijens
Early Th1 polarisation in infants



Antoon van Oosterhout, Frans Nijkamp
Role of IL5 in allergy and eosinophil influx



Dirkje Postma
Genetics of allergy and asthma



Large birth cohort studies e.g. KOALA, PIAMA.
Exposure to domestic and food allergens and their avoidance

For a more complete review, see: Nolte MA and van der Meer JWM: **Inflammatory responses to infection: The Dutch contribution.** Immunol. Letters 2014, 50th DSI Anniversary Special Issue