
Rob ter Horst

Bioinformatician

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Professional Profile

I am fascinated by the potential of omics data for biological discovery. I have a passion for statistics and machine learning. I am a generalist and easily excited about new ideas and perspectives. During my undergraduate education in chemistry, I focused on computational chemistry and eventually on bioinformatics. I developed my knowledge of machine learning while working in the fields of metabolomics and cellular image analysis. During my PhD research, I used statistics and pattern recognition to identify factors that shape our immune system in health and disease. In this research project, I gained experience with various types of omics data, including genomics, transcriptomics and metabolomics. I contributed to the design of several cohort studies in clinical immunology, and I am also the initiator and research subject of a sophisticated N=1 study. To make science more accessible to the public, I write blogs for the Dutch National Science Foundation (KNAW) and create vlogs about science. Very recently, I started as a postdoctoral researcher at the CeMM Research Center for Molecular Medicine in Vienna, Austria.

I have published 28 scientific papers so far, with a cumulative citation number of 1313 and an h-index of 12 (as of Sept 2020) according to [Google Scholar](#).

Work Experience

• Postdoctoral researcher / CeMM

01 FEB 2020 - PRESENT, VIENNA, AUSTRIA

Prof. Dr. Christoph Bock's Lab, CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences

Using bulk genetics and epigenomics data, I study the complexities of the immune system. In my first project, I study the complex roles of epigenome regulation in the immune response of hematopoietic cells by chromatin analysis in a longitudinal cohort of 300 healthy individuals. In future projects, I plan to study the immune regulatory function of the non-hematopoietic, structural cells in the human body using single-cell transcriptomics data.

• Move to Vienna / From Nijmegen, The Netherlands to Vienna, Austria

01 JAN 2020 - 31 JAN 2020, VIENNA, AUSTRIA

• PhD Student / Radboud University Nijmegen Medical Center

01 FEB 2015 - 31 DEC 2019, NIJMEGEN, THE NETHERLANDS

Prof. Dr. Mihai G. Netea's Lab, Radboud University Medical Centre, Department of Internal Medicine

During my PhD, I studied the effects of host and environmental factors on our immune system using large cohorts. One of the most interesting findings was the influence of seasonality on our immune system, which we were able to verify in independent cohorts. I gained experience with several types of omics data, including genomics, transcriptomics and metabolomics.

• Fulbright Scholar / University of California San Diego

01 FEB 2016 - 30 JUNE 2016, SAN DIEGO, UNITED STATES

Prof. Dr. Nathan E. Lewis' Lab, University of California San Diego

I was awarded a Fulbright Scholarship to visit the Lewis Lab for 5 months. I used metabolic and whole cell modeling to study the immune system, specifically the difference between strong and weak immune reactions.

• Staff Researcher / Radboud University Nijmegen Medical Center

01 MAY 2013 - 31 JAN 2015, NIJMEGEN, THE NETHERLANDS

Dr. Richard A. Notebaart's Lab & Prof. Dr. Martijn A. Huynen's Lab, Radboud University Medical Center, Center for Molecular and Biomolecular Informatics

I used constraint-based metabolic modeling and statistics to investigate the cellular consequences of mitochondrial disorders and heart failure.

Ce-M-M-

Research Center for Molecular Medicine
of the Austrian Academy of Sciences

Radboudumc

UC San Diego

Radboudumc

- **Staff Researcher / Radboud University Nijmegen Medical Center**

01 APR 2012 - 30 APR 2013, NIJMEGEN, THE NETHERLANDS

Prof. Dr. Martijn A. Huynen's Lab, Centre for Molecular and Biomolecular Informatics

I worked on various projects, including simulation of centromeric nucleosome loading and evaluating the merit of these models using ChIP-seq data, and studying the signatures of the RIG-I-like receptor (RLR) pathway.

Education

- **Master of Science in Chemistry / Radboud University**

01 SEPT 2009 - 31 MAR 2012, NIJMEGEN, THE NETHERLANDS

Master in Chemistry, with a focus on chemical and biological data analysis. I performed a 15-month internship at the Departments of Analytical and Physical Chemistry. I conducted NMR measurements of the blood of rat models of multiple sclerosis. I compared the resulting spectra with those of healthy mice using machine learning. Judicium: summa cum laude, ~top 2%

Radboud University



- **Nuffic Talent Scholar / Broad Institute of Harvard and MIT**

21 FEB 2011 - 20 AUG 2011, CAMBRIDGE, UNITED STATES

I was awarded a Nuffic Talent Scholarship to visit the lab of Anne E. Carpenter at the Broad Institute of Harvard and MIT for 6 months. I evaluated which computational methods perform best when profiling morphological cellular images.



- **Bachelor of Science in Chemistry / Radboud University**

01 SEPT 2006 - 31 AUG 2009, NIJMEGEN, THE NETHERLANDS

Bachelor in Chemistry, with a focus on chemical and biological data analysis. I performed an internship at the Department of Analytical Chemistry, where I evaluated different implementations of ANOVA-PCA to build a diagnostic model of Multiple Sclerosis based on proteomics data. Judicium: summa cum laude, ~top 2%.

Radboud University



- **High School / Candeia College**

01 SEPT 2000 - 31 AUG 2006, DUIVEN, THE NETHERLANDS

High school education. Member of the debating team. Judicium: cum laude

Scholarships

- **Fulbright scholarship**

Awarded in the 2015-2016 academic year. Used to visit the University of California San Diego for 5 months. Title: "Unraveling Complex Diseases by Comprehensive Whole-Cell Modeling"

- **Huygens Scholarship Program talent scholarship (Nuffic)**

Grant for international internship. Awarded in 2010 to ~100 students across all fields, studies and academic levels in the Netherlands. Used for a 6-month internship at the Broad Institute of Harvard and MIT.

Awards

- **Finalist "Radboud Talks 2019" competition**

Yearly research [pitch competition](#) organized by the Radboud University Nijmegen

- **Finalist "Klokhuis Wetenschapsprijs 2017" Science Prize**

Science prize awarded by one of the [biggest science TV shows](#) in the Netherlands

- **Best poster**

Benelux Bioinformatics Conference 2012 best poster prize.

- **Cell Cover Design**

Designed and created the cover of the Journal "Cell" ([2016, Volume 167, Issue 4](#)).

Student Supervision

- **Danique Bodt / 6-month Bachelor Internship**

MAR 2019 - AUG 2019, Radboud University Medical Center, Nijmegen, The Netherlands

Studying the effects of cold exposure on the immune response in a cohort of 196 healthy individuals.

- **Alex Schiltmans / 6-month Bachelor Internship**

AUG 2018 - FEB 2019, Radboud University Medical Center, Nijmegen, The Netherlands

Metabolite set enrichment analysis in a cohort of 302 obese individuals.

- **Lysanne Rosaria / 6-month Bachelor Internship**

FEB 2018 - SEPT 2018, Radboud University Medical Center, Nijmegen, The Netherlands

Preprocessing of mass-spectrometry based metabolite profiles.

Teaching Experience

- **Bioinformatics / Teaching assistant**

2012, Radboud University Medical Center, Nijmegen, The Netherlands

Teaching assistant for the bioinformatics course at the Center for Molecular and Biomolecular Informatics.

- **Statistics / Teaching assistant**

2009 - 2012, Radboud University, Nijmegen, The Netherlands

Teaching assistant for three terms in the statistics course in the Department of Analytical Chemistry.

- **Mathematics / High school tutor**

2005 - 2006, Candea College, Duiven, The Netherlands

High school tutor in mathematics for fellow students.

Talks

- 2018 **Invited talk: BioSB senior researcher talk, Genetic Variants & Population Studies session** - "Linking genetics to immunology in cohort studies" – The Netherlands Bioinformatics and Systems Biology conference, Lunteren, The Netherlands

- 2018 **Invited talk: EMBL-EBI training event Romanian Society of Bioinformatics** - "Intra- and interindividual variation in immune responses", RSBI, Bucharest, Romania

- 2018 **Invited talk: EMBL-EBI training event Romanian Society of Bioinformatics** - "My experiences in science communication: blogs, music festivals and more", RSBI, Bucharest, Romania

- 2017 **CVON In-Control conference** - "IL-18 pathway modulates lipoprotein metabolism in obesity related atherosclerosis", CVON In-Control, Amersfoort, The Netherlands

Posters

- 2018 **New Frontiers Symposium**, "Variability and seasonality of the immune system", Cluj, Romania

- 2016 **Summer Frontiers 'Systems Biology of Innate Immunity' symposium**, "The influence of host and environmental factors on individual cytokine responses", Nijmegen, The Netherlands

- 2014 **EMBL conference: From Functional Genomics to Systems Biology**, "Adaptive value of metabolic responses to gene knockouts in yeast", Heidelberg, Germany

- 2013 **Benelux Bioinformatics Conference**, "Modeling centromeric histone H3 incorporation in Plasmodium falciparum.", Nijmegen, the Netherlands

- 2010 **Conference on Chemometrics in Analytical Chemistry**, "Multivariate analysis of 2D 1H-NMR spectra of a preclinical multiple sclerosis model", Antwerp, Belgium

Science Outreach

- 2016-present **Blogs for the Dutch Science Foundation (NEMO-Kennislink / KNAW) "Faces of Science"**. I write blogs for the Dutch National Science Foundation to inform the public about my scientific findings at those of others. [LINK](#)

- 2019-present **Science YouTube Channel: "The Quantified Scientist"**, YouTube channel showing the power of data analysis for data in our daily lives. [LINK](#)

- 2019 **Talk at "Pint of Science"**. "Quantified Scientist: Tracking Myself", Public presentation for the internationally known "Pint of Science" organisation. [LINK](#)

- 2019 **Talk at Accenture Consultancy Amsterdam**, "Quantified Scientist: Data Analysis on your Life", Presentation at Accenture showing the large N=1 project I am running.

Independent Research Projects

- 2018-present **Comprehensive N=1 Project into 3-year Changes in Brain Activity, Sleep Patterns and Microbiome.** I created a research project where in collaboration with The Donders Institute Nijmegen, The Radboudumc Nijmegen, The University of Vienna and the Monash University Melbourne I collect weekly brain MRIs, weekly sleep EEGs and weekly microbiome samples of myself to track changes in a single individual over time. [LINK](#)
- 2017 **Science at the Lowlands Music Festival**, I designed and executed a research project where we investigated the effect of cold exposure on the immune system. This was a large undertaking where we created a cohort of 200 individuals in 3 days at a music festival, which included 400 blood drawings and an constructing an on-site laboratory. [LINK](#)

Skills

- Programming: R, Python, MATLAB
- Design: Adobe suite: Illustrator, Photoshop, Premiere Pro, After Effects
- Languages: English (fluent), Dutch (mother tongue), German (advanced)

In the Media

International

- [Cell Blog](#) "One pipette at a time: A unique HFGP Cell cover"
- [Broad Institute Blog](#) "Deciphering the drivers of immune system variability"

Dutch (selected)

- [NRC](#) (national newspaper) "Our immune system is weaker in Winter"
- [Nu.nl](#) (online news) "Elderly more at risk for Lyme disease?"
- [NRC](#) (national newspaper) "How the most measured man of the Netherlands lives"
- [AD Video](#) (TV) "Rob is the most measured man of the Netherlands"
- [Radio 1](#) (national radio) "The most measured man of the Netherlands"
- [Radio 1](#) (national radio) "Why we get sick more often in Winter"

Selected Publications

*Shared 1st authorship / [# citations]

1. 2020. **Rob ter Horst***, Martin Jaeger*, Michelle Brouwer, Lisa van de Wijer, ..., Heidi Lemmers, Helga Dijkstra, Irma Joosten, Hans Koenen, Mihai G. Netea and Leo A.B. Joosten. "Seasonal and non-seasonal longitudinal changes in immune function". [In revision at Journal of Immunology \[NA\]](#)
Summary: Based on the findings from Ter Horst et al. Cell, 2016 (Publication 4) we designed a longitudinal cohort and characterized in detail the seasonal effects on a comprehensive set of immune parameters. I was responsible for the data analysis and co-designed the cohort.
2. 2020 Begoña Dobon*, **Rob ter Horst***, Hafid Laayouni, Mayukh Mondal, Erica Bianco, David Comas, Mihai Ioana, Elena Bosch, Jaume Bertranpetit, Mihai G. Netea. "The shaping of immunological responses through natural selection after the Roma diaspora". [Scientific Reports, In Press \[NA\]](#)
Summary: We identified under recent selection several pathways implicated in immune responses in the Roma population, the largest transnational ethnic minority in Europe and it can be considered the last human migration of South Asian origin into the continent. I was responsible for the immunological data analysis.
3. 2020 **Rob ter Horst***, Inge CL van den Munckhof*, Kiki Schraa, Raul Aguirre-Gamboa, ..., Yang Li, Leo AB Joosten, Joost HW Rutten, Mihai G Netea, Niels P Riksen. "Sex-Specific Regulation of Inflammation and Metabolic Syndrome in Obesity." [Arterioscler Thromb Vasc Biol. May;ATVBAHA120314508. \[0\]](#)
Summary: We identified new sex-specific pathways that influence inflammation in obesity. I was responsible for the data analysis and statistics.
4. 2016. **Rob ter Horst***, Martin Jaeger*, Sanne P. Smeekens, ..., Jos W. M. van der Meer, Charles A. Dinarello, Norman Pavelka, Cisca Wijmenga, Richard A. Netea, Leo A. B. Joosten, and Mihai G. Netea. "Host and Environmental Factors Influencing Individual Human Cytokine Responses." [Cell 167\(4\):1111-1124.e13. \[171\]](#)
Summary: We characterized the contributions of host and environmental factors to a comprehensive set of immune parameters. Interestingly, seasonality was one of the most important factors influencing the immune response. I was responsible for the data analysis and also made and designed the cover of this issue of "Cell".

Publications Contributed to Extensively

*Shared 1st authorship / [# citations]

5. 2020. Inge C.L. van den Munckhof*, **Rob ter Horst***, Kiki Schraa, Rinke Stienstra, Marije Oosting, Martin Jaeger, ..., Charles A. Dinarello, Niels P. Riksen, Joost H.W. Rutten, Leo A.B. Joosten, Mihai G. Netea. "*IL-18 binding protein: a novel biomarker and important modulator of lipoprotein metabolism in obesity-related atherosclerosis*". Submitted to *JACC: basic to translational science*. [NA]
6. 2020 Jelle Zwaag*, **Rob ter Horst***, Ivana Blaženović, Daniel Stoessel, Jacqueline Ratter, Josephine M. Worseck, Nicolas Schauer, Rienke Stienstra, Mihai G. Netea, Dieter Jahn, Peter Pickkers, Matthijs Kox. "*Involvement of Lactate and Pyruvate in the Anti-Inflammatory Effects Exerted by Voluntary Activation of the Sympathetic Nervous System.*" *Metabolites*; 2020 Apr;10(4). [0]
7. 2020. Charlotte D.C.C. van der Heijden, **Rob ter Horst**, Inge C.L. van den Munckhof, Kiki L. Schraa, Jacqueline de Graaf, Leo A.B. Joosten, Jan A.H. Danser, Mihai G. Netea, Jaap Deinum, Joost Rutten, Niels P. Riksen. "*Vasculometabolic and Inflammatory Effects of Aldosterone in Obesity.*" *J Clin Endocrinol Metab.* 2020 Aug 1;105(8):dgaa356. [NA]
8. 2017. Jorge Dominguez-Andres, Rob J. W. Arts, **Rob ter Horst**, Mark S. Gresnigt, Sanne P. Smeekeens, Jacqueline M. Ratter, Ekta Lachmandas, Lily Boutens, Frank L. van de Veerdonk, Leo A. B. Joosten, Richard A. Notebaart, Carlos Ardavin, and Mihai G. Netea. "*Rewiring Monocyte Glucose Metabolism via C-Type Lectin Signaling Protects against Disseminated Candidiasis.*" *PLoS Pathogens* 13(9):e1006632. [28]
9. 2016. Rob J. W. Arts, Boris Novakovic, **Rob ter Horst**, ... , Luke A. O'Neill, Charles A. Dinarello, Niels P. Riksen, Reinout van Crevel, Clary Clish, Richard A. Notebaart, Leo A. B. Joosten, Hendrik G. Stunnenberg, Ramnik J. Xavier, and Mihai G. Netea. "*Glutaminolysis and Fumarate Accumulation Integrate Immunometabolic and Epigenetic Programs in Trained Immunity.*" *Cell Metabolism* 24(6):807–19. [229]
10. 2016. Marije Oosting*, Mariska Kerstholt*, **Rob ter Horst**, Yang Li, Patrick Deelen, ..., Mihai G. Netea, and Leo A. B. Joosten. "*Functional and Genomic Architecture of Borrelia Burgdorferi-Induced Cytokine Responses in Humans.*" *Cell Host & Microbe* 20(6):822–33. [15]
11. 2013. Vebjorn Ljosa, Peter D. Caie, **Rob ter Horst**, Katherine L. Sokolnicki, ... , Neil O. Carragher, and Anne E. Carpenter. "*Comparison of Methods for Image-Based Profiling of Cellular Morphological Responses to Small-Molecule Treatment.*" *Journal of Biomolecular Screening* 18:1321–29. [101]

Additional Publications from Collaborative Research

*Shared 1st authorship / [# citations]

12. 2020. Amit Frishberg*, Inge van den Munckhof*, **Rob ter Horst**, Kiki Schraa, Leo AB Joosten, Joost HW Rutten, Mihai G. Netea, Niels Riksen, Irit Gat-Viks. "*Cross-omics analysis of immunometabolic traits identifies two types of metabolic syndrome*". Submitted to *Nature Medicine* [NA]
13. 2020. Namam Ali, Anna WM Janssen, Alain J. van Gool, Wouter van der Heijden, **Rob ter Horst**, Martin Jaeger, Leo AB Joosten, Mihai G Netea, Rinke Stienstra, Priya Vart, Lisa Van de Wijer, Bastiaan E De Galan, Cees J Tack, "*Limited impact of impaired awareness of hypoglycemia and severe hypoglycemia on inflammatory profile in subjects with type 1 diabetes*". *Diabetes, Obesity and Metabolism*, In Press.
14. 2020. Ombretta Melaiu, Angelica Macaudo, Juan Sainz, Diego Calvetti, Maria Sole Facioni, Giuseppe Maccari, **Rob ter Horst**, Mihai G. Netea, Yang Li, , ..., Stefano Landi, Daniele Campa, Federico Canzian, Federica Gemignani, "*Common gene variants within 3'untranslated regions as modulators of multiple myeloma risk and survival*". *The International Journal of Cancer*, In Press [0]
15. 2020. Lianmin Chen, Inge C. L. van den Munckhof, Kiki Schraa, **Rob ter Horst**, Martijn Koehorst, ..., Niels P. Riksen, Joost H. W. Rutten, Leo A. B. Joosten, Cisca Wijmenga, Alexandra Zhernakova, Mihai G. Netea, Jingyuan Fu and Folkert Kuipers. "*Genetic and microbial associations to plasma and fecal bile acids in obese humans relate to plasma lipids and liver fat content*", *Cell Reports*, In Press [0]
16. 2020. Lorenzo Bonaguro, Maren Koehne, Lisa Schmidleithner, Stefanie Warnat-Herresthal, ..., **Rob ter Horst**, Martin Jaeger, Souad Rahmouni, Michel Georges, Christine Falk, Yang Li, Elvira Mass, Marc Beyer, Leo A. B. Joosten, Mihai G. Netea, Thomas Ulas, Joachim L. Schultze, Anna C. Aschenbrenner. "*CRELD1 modulates homeostasis of the immune system in mouse and human.*" *Nature Immunology*, In Press [0]
17. 2020. José Maldonado, Daniele Campa, Jan Springer, Jon Badiola, Yasmeen Niazi, Ana Moñiz-Díez, Francisca Hernández-Mohedo, Pedro González-Sierra, **Rob ter Horst**, ..., Charles Dumontet, Federico Canzian, Asta Försti, Manuel Jurado, and Juan Sainz "*Host immune genetic variations influence the risk of developing acute*

myeloid leukaemia: Results from the NuCLEAR consortium”, *Blood Cancer Journal* 10 (7), [0]

18. 2020 Jose M. Sánchez-Maldonado, Manuel Martínez-Bueno, Helena Canhão, **Rob ter Horst**, Sonia Muñoz-Peña, Ana Moñiz-Díez, ..., Marieke J.H. Coenen, Vibeke Andersen, Rafael Cáliz, Juan Sainz. “*NFKB2 polymorphisms associate with the risk of developing rheumatoid arthritis and response to TNF inhibitors: Results from the REPAIR consortium.*” *Sci Rep.* 2020 Mar;10(1):4316. [2]
19. 2020 Samuel M. Gonçalves, Cláudio Duarte-Oliveira, Cláudia Campos, Vishukumar Aimanianda, **Rob ter Horst**, ..., Mihai Netea, Jean-Paul Latgé, Cristina Cunha, Agostinho Carvalho. “*Phagosomal removal of fungal melanin reprograms macrophage metabolism to promote antifungal immunity.*” *Nat Commun.* 2020;11(1). [1]
20. 2019. Jose M. Sánchez-Maldonado, Rafael Cáliz, Luz Canet, **Rob ter Horst**, Olivier Bakker, ..., João E. Fonseca, Mihai G. Netea, Marieke J. H. Coenen, Juan Sainz “*Steroid hormone-related polymorphisms associate with the development of bone erosions in rheumatoid arthritis and help to predict disease progression: Results from the REPAIR consortium.*” *Sci Rep.* Oct 15;9(1):14812. [1]
21. 2019. Jorge Dominguez-Andres, Boris Novakovic, Yang Li, ... , **Rob ter Horst**, Leo A. B. Joosten, Cisca Wijmenga, Alessandro Michelucci, Tom van der Poll, Matthijs Kox, Peter Pickkers, Vinod Kumar, Henk Stunnenberg, and Mihai G. Netea. “*The Itaconate Pathway Is a Central Regulatory Node Linking Innate Immune Tolerance and Trained Immunity.*” *Cell Metabolism* 29(1):211-220.e5. [54]
22. 2019. Ruud P. H. Raijmakers, Anne F. M. Jansen, Stephan P. Keijmel, **Rob ter Horst**, Megan E. Roerink, Boris Novakovic, Leo A. B. Joosten, Jos W. M. van der Meer, Mihai G. Netea, and Chantal P. Bleeker-Rovers. “*A Possible Role for Mitochondrial-Derived Peptides Humanin and MOTS-c in Patients with Q Fever Fatigue Syndrome and Chronic Fatigue Syndrome.*” *Journal of Translational Medicine* 17(1):157. [0]
23. 2019. Inge Grondman, Rob J. W. Arts, Rebecca M. Koch, Guus P. Leijte, Jelle Gerretsen, Niklas Bruse, Rosalie W. M. Kempkes, **Rob ter Horst**, Matthijs Kox, Peter Pickkers, Mihai G. Netea, and Mark S. Gresnigt. “*Frontline Science: Endotoxin-Induced Immunosuppression Is Associated with Loss of Monocyte Metabolic Plasticity and Reduction of Oxidative Burst.*” *Journal of Leukocyte Biology* 106(1):11–25. [4]
24. 2019. Ruud P.H. Raijmakers, John Stenos, Stephan P. Keijmel, **Rob ter Horst**, ..., Jos W. Van Der Meer, Mihai G. Netea, Chantal P. Bleeker-Rovers, Leo A.B. Joosten, Stephen R. Graves. “*Long-Lasting Transcriptional Changes in Circulating Monocytes of Acute Q Fever Patients.*” *Open Forum Infect Dis.* Jul 1;6(7). [1]
25. 2019. Arjan van Laarhoven, Sofiati Dian, Suzanne van Dorp, ... , **Rob Ter Horst**, Mihai G. Netea, ... , Ayesha Verrall, Ahmad Rizal Ganiem, Reinout van Crevel. “*Immune Cell Characteristics and Cytokine Responses in Adult HIV-Negative Tuberculous Meningitis: An Observational Cohort Study.*” *Scientific Reports* 9(1):884. [6]
26. 2018. Siroon Bekkering, Rob J. W. Arts, Boris Novakovic, Ioannis Kourtzelis, ..., **Rob ter Horst**, Julia van Tuijl, Romana T. Netea-Maier, Frank L. van de Veerdonk, Triantafyllos Chavakis, Leo A. B. Joosten, Jos W. M. van der Meer, Henk Stunnenberg, Niels P. Riksen, and Mihai G. Netea. “*Metabolic Induction of Trained Immunity through the Mevalonate Pathway.*” *Cell*, 2018 Jan 11;172(1-2):135-146.e9. [176]
27. 2018. Rineke Steenbergen, Martin Oti, **Rob ter Horst**, Wilson Tat, ..., Woo Jung Cho, Michael Joyce, Bas E. Dutilh, and D. Lorne Tyrrell. “*Establishing Normal Metabolism and Differentiation in Hepatocellular Carcinoma Cells by Culturing in Adult Human Serum.*” *Scientific Reports* 8(1):11685. [7]
28. 2018. Melissa A. Ilardo, Ida Moltke, Thorfinn S. Korneliussen, Jade Cheng, ... , **Rob ter Horst**, Leo A. B. Joosten, Mihai G. Netea, Suhartini Salingkat, Rasmus Nielsen, and Eske Willerslev. “*Physiological and Genetic Adaptations to Diving in Sea Nomads.*” *Cell* 173(3):569-580.e15. [68]
29. 2016. Mihai G. Netea, Leo A. B. Joosten, Yang Li, Vinod Kumar, Marije Oosting, Sanne Smeekens, Martin Jaeger, **Rob ter Horst**, Melanie Schirmer, ... , Curtis Huttenhouwer, Hans Koenen, Irma Joosten, Ramnik J. Xavier, and Cisca Wijmenga. “*Understanding Human Immune Function Using the Resources from the Human Functional Genomics Project.*” *Nature Medicine*, 2016 Aug 4;22(8):831-3 [27]
30. 2016. Melanie Schirmer, Sanne P. Smeekens, Hera Vlamakis, Martin Jaeger, Marije Oosting, Eric A. Franzosa, **Rob ter Horst**, ..., Cisca Wijmenga, Mihai G. Netea, and Ramnik J. Xavier. “*Linking the Human Gut Microbiome to Inflammatory Cytokine Production Capacity.*” *Cell*. 2016 Dec 15;167(7):1897. [327]
31. 2015. Robin van der Lee, Qian Feng, Martijn A. Langereis, **Rob ter Horst**, Radek Szklarczyk, Mihai G. Netea, Arno C. Andeweg, Frank J. M. van Kuppeveld, and Martijn A. Huynen. “*Integrative Genomics-Based Discovery of Novel Regulators of the Innate Antiviral Response.*” *PLoS Computational Biology* 11(10):e1004553. [12]