



MOLECULES & MEDICINE

Networking symposium 22 January 2016
Future Medicines
Science for Life
Utrecht Life Sciences
Utrecht Science Park

In this Symposium booklet you will find the Scientific profiles of Utrecht Principal Investigators with an interest in Molecules and Medicine in alphabetical order. In this table we list their Biomedical themes of interest. More information on these PI's can often be found at www.uu.nl/staff.

We update this list on our site www.uu.nl/science/uips. Please email science.uips@uu.nl if you want to add your profile as well.

For future life sciences events we would like to suggest www.utrechtlifesciences.nl

Principal Investigator	Department	Cardio-vascular	Neuro-science	Immu-nology	Infection	Stem cell Devel.	Cancer
Adan	UMCU		X				
Akhmanova	SCI/BIO					X	X
Alblas	UMCU					X	
Altelaar	SCI/PHARM		X				X
Baldus	SCI/CHEM	X	X	X	X	X	X
van Bergen en Henegouwen	SCI/BIO						X
Berkers	SCI/CHEM			X			X
Boelens	SCI/CHEM					X	X
A. de Boer	SCI/PHARM	X			X		X
R. de Boer	SCI/BIO			X			
Bogaert	UMCU			X	X		
Boons	SCI/CHEM/PHARM			X	X		X
Bonvin	SCI/CHEM	X	X	X	X	X	X
Boxem	SCI/BIO					X	
Breukink	SCI/CHEM				X		X
Creemers	UMCU					X	
Cuppen	UMCU					X	X
Egan	UMCU				X	X	X
Egberts	SCI/PHARM/UMCU		X				
Folkerts	SCI/PHARM		X	X			
Garssen	SCI/PHARM		X	X	X		
de Graaff	SCI/BIO		X	X			
Groenink	SCI/PHARM		X				
Haagsman	VET			X	X		
de Haard	SCI/BIO/ArgenX			X			X
Heck	SCI/CHEM/PHARM			X		X	X
Helms	VET				X	X	
Hennink	SCI/PHARM					X	X
den Hertog	HUBRECHT				X	X	X
van den Heuvel	SCI/BIO					X	X
van der Heyden	UMCU	X					
Hoogenraad	SCI/BIO		X			X	
Kemmink	SCI/PHARM			X			
Kersten	Intravacc			X	X		
Kleizen	SCI/CHEM		X	X			X
Klungel	SCI/PHARM	X					
Kraneveld	SCI/PHARM		X	X			
Kremer	TNO	X		X			
Kruijtzter	SCI/PHARM		X		X		X
Küball	UMCU			X		X	X
Van Kuppeveld	VET			X	X		
Leufkens	SCI/PHARM	X	X				X
Liskamp	SCI/PHARM				X		X
Logtenberg	Merus			X			X
Maitland van der Zee	SCI/PHARM	X		X			X
Malda	UMCU					X	
Martin	SCI/PHARM				X		X
Masereeuw	SCI/PHARM					X	
Maurice	UMCU					X	X
Mertens	SCI/PHARM/Sanquin	X		X			
Nierkens	UMCU			X			
Nolte 't-Hoen	VET			X			
Van Nostrum	SCI/PHARM	X					X
Oliveira	SCI/BIO						X
Parren	GenMab			X			
Penning	VET					X	X
Pieters	SCI/PHARM				X		X

Redegeld	SCI/PHARM			X			
Reggiori	UMCU				X		X
Rehmann	UMCU						X
Rijkers	SCI/PHARM		X		X		X
Ruijtenbeek	SCI/PHARM/ Pamgene		X		X		X
Sanders	UMCU			X	X		
Scheefhals	CrossBeta		X				
Schiffelers	UMCU			X	X		X
Schilder	UMCU				X		
Van der Sluijs	UMCU		X	X			X
Van Sorge	UMCU			X	X		
Stoorvogel	VET			X		X	X
Tommassen	SCI/BIO				X		
Vermonden	SCI/PHARM					X	
Vries	HUBRECHT					X	X
Willemsen	SCI/PHARM			X	X		
Zand	SCI/CHEM		X				X

Roger A.H. Adan

Rudolf Magnus Institute, Dept Neuroscience and Pharmacology, Brain Division, UMCU

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**Education and Experience**

2002-present	Full professor, Dept Neuroscience and Pharmacology, Brain Division, UMCU
1997-2002	Associate professor Dept Neuroscience and Pharmacology, Brain Division, UMCU
1992-1997	Assistant professor Dept Pharmacology and Anatomy, Brain Division, UMCU
1988-1992	PhD Molecular neurobiology Rudolf Magnus Institute, Utrecht University (with J.P.H. Burbach) and MCBL, Singapore

Other functions: scientific advisory board Altrecht science; Advisor Rintveld Eating disorder clinic

Research Keywords: Molecular and neural circuits underlying feeding behavior; Obesity and eating disorders; biological psychiatry; neuropeptides,

Theme: neuroscience

Offering: rodent models for psychiatric diseases in general and specifically for obesity and eating disorders

Looking for: drugs to validate

Selected Recent Publications:

1. Adan RA, Vanderschuren LJ, la Fleur SE. Anti-obesity drugs and neural circuits of feeding. *Trends Pharmacol Sci.* 2008 Apr;29(4):208-17
2. Janhunen SK, van der Zwaal EM, la Fleur SE, Adan RA. Inverse agonism at $\alpha 2A$ adrenoceptors augments the hypophagic effect of sibutramine in rats. *Obesity (Silver Spring).* 2011 Oct;19(10):1979-86.
3. de Backer MW, la Fleur SE, Brans MA, van Rozen AJ, Luijendijk MC, Merkestein M, Garner KM, van der Zwaal EM, Adan RA. Melanocortin receptor-mediated effects on obesity are distributed over specific hypothalamic regions. *Int J Obes (Lond).* 2011 May;35(5):629-41
4. Adan RA, Tiesjema B, Hillebrand JJ, la Fleur SE, Kas MJ, de Krom M. The MC4 receptor and control of appetite. *Br J Pharmacol.* 2006 Dec;149(7):815-27

Anna Akhmanova

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**Education and Experience**

2011-present	Professor, Cell Biology, Utrecht University
2008-2010	Associate Professor, Erasmus MC, Rotterdam
2001-2008	Group leader, Erasmus MC, Rotterdam
1997-2001	Post-doc, Erasmus MC, Rotterdam
1996-1997	Post-doc, University of Nijmegen
1992-1996	PhD student, University of Nijmegen

Other functions: Chair of the Dutch Microscopy Society (NVvM)

Elected memberships and awards:

- Member of the European Molecular Biology Organization (EMBO)
- Member the Royal Netherlands Academy of Arts and Sciences (KNAW)
- ERC Synergy grant 2013 (together with Dr. Marileen Dogterom, TU Delft)
- ALW Vernieuwingsimpuls VICI 2007

Research Keywords: cytoskeleton, microtubules, actin, dynein, kinesin, membrane trafficking, Rab GTPases, exocytosis, live cell imaging, in vitro reconstitution of cytoskeletal dynamics, mouse development

Theme: development, cancer

Offering: mammalian cell biology expertise, 2D and 3D cell cultures, high-resolution fluorescent microscopy including TIRF, confocal microscopy, FRAP and photoablation, expertise on cytoskeleton-targeting drugs, mouse knock-in and knockout models

Looking for: disease models to address cytoskeletal and membrane trafficking-related processes in cell culture and in mice

Selected Recent Publications:

1. Akhmanova A, Steinmetz MO. 2015. Control of microtubule organization and dynamics: two ends in the limelight. *Nat Rev Mol Cell Biol.*, 6: p. 711-26.
2. Jiang K, Hua S, Mohan R, Grigoriev I, Yau KW, Liu Q, Katrukha EA, Altelaar AF, Heck AJ, Hoogenraad CC, Akhmanova A. 2014. Microtubule minus-end stabilization by polymerization-driven CAMSAP deposition. *Dev Cell*, 28: p. 295-309.
3. van der Vaart B, van Riel WE, Doodhi H, Kevenaar JT, Katrukha EA, Gumy L, Bouchet BP, Grigoriev I, Spangler SA, Yu KL, Wulf PS, Wu J, Lansbergen G, van Battum EY, Pasterkamp RJ, Mimori-Kiyosue Y, Demmers J, Olieric N, Maly IV, Hoogenraad CC, Akhmanova A. 2013. CFEOM1-associated kinesin KIF21A is a cortical microtubule growth inhibitor. *Dev Cell*, 27: p. 145-60.
4. Mohan R, Katrukha EA, Doodhi H, Smal I, Meijering E, Kapitein LC, Steinmetz MO, Akhmanova A. 2013. End-binding proteins sensitize microtubules to the action of microtubule-targeting agents. *Proc Natl Acad Sci U S A*, 110: p. 8900-5.
5. Jiang K, Toedt G, Montenegro Gouveia S, Davey NE, Hua S, van der Vaart B, Grigoriev I, Larsen J, Pedersen LB, Bezstarosti K, Lince-Faria M, Demmers J, Steinmetz MO, Gibson TJ, Akhmanova A. 2012. A Proteome-wide screen for mammalian SxIP motif-containing microtubule plus-end tracking proteins. *Curr Biol*, 22: p. 1800-7.

Jacqueline Alblas

Orthopaedics, UMCU, Division Surgical Specialties

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Education and Experience

2014-present	Associate professor Bone regeneration, Orthopaedics, UMCU
2005-2014	Post-doc/Assistant professor, Orthopaedics, UMCU
1996-2004	Post-doc, departments Immunology at VU Medical Center, Respiratory Medicine at UMCU, Physiological Chemistry at UU
1990-1995	PhD Cellular Biochemistry, Netherlands Cancer Institute
1989	MSc Biology, Leiden University

Short bio: Jacqueline Alblas has wide experience in bone regenerative medicine, where the main focus is to develop hybrid constructs in which scaffold material and cell stimuli are optimally combined with the regenerative potential of adult stem cells. Important expertise is present with respect tissue architecture, (neo)vascularization, gene delivery and animal models. This is complemented by investigations of the influence of immune cells and inflammatory mediators on bone regeneration.

Printing of living cells, which was developed in her group since 2005, has received a lot of attention in the last years, and has expanded considerably. Using this technology, dedicated biomaterials suitable for bioprinting have been designed and optimized and are now being employed in intricate prevascularized bone replacement constructs. They are used to investigate the role of self-organisation of cells and matrix components in tissue repair and also act as model systems for bone-residing diseases, such as multiple myeloma.

Other academic activities include: Board member NBTE (Netherlands Society for Biomaterials and Tissue Engineering); Member AO Research Review Commission; Editorial Board of Bioengineering; Member TERMIS. Furthermore, she is Course director/lecturer within Medicine and Biomedical Sciences curricula (BA/MA), University Utrecht Graduate School of Life Sciences, Regenerative Medicine programme; co-organiser/speaker at diverse international conferences.

Research Keywords: bone tissue engineering, 3D tissue printing, gene therapy, inflammation, signal transduction

Theme: Stem cells and regenerative medicine

Offering: 3D printing, controlled delivery, animal models for bone regeneration

Looking for: biofunctionalized materials

Selected Recent Publications:

1. Loozen L, Helm van der YJ, Oner FC, Dhert W, Kruijff MC, Alblas J. Bone morphogenetic protein-2 non-viral gene therapy in a goat iliac crest model for bone formation. *Tissue Eng Part A*. 2015 May;21(9-10):1672-9.
2. Poldervaart MT, van der Stok J, de Haas MF, 't Hart MC, Öner FC, Dhert WJ, Weinans H, Alblas J. Growth factor-induced osteogenesis in a novel radiolucent bone chamber. *Eur Cell Mater*. 2015 Jan 2;29:35-41.
3. Loozen LD, Wegman F, Oner FC, Dhert WJA and Alblas J. Porous bioprinted constructs in BMP-2 non-viral gene therapy for bone tissue engineering. *Journal of Materials Chemistry B*, 2013. 1:48, 6619-6626 (IF: 6.6, T10).
4. Fedorovich NE, Schuurman W, Wijnberg HM, Prins HJ, van Weeren PR, Malda J, Alblas J, Dhert WJ. Biofabrication of osteochondral tissue equivalents by printing topologically defined, cell-laden hydrogel scaffolds. *Tissue Eng Part C Methods*. 2012 Jan;18(1):33-44. (IF: 4.1, T25)
5. Fedorovich NE, Alblas J, Hennink WE, Oner FC, Dhert WJ. Organ printing: the future of bone regeneration? *Trends Biotechnol*. 2011 Dec;29(12):601-6.

Maarten Altelaar

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Education and Experience

- | | |
|--------------|---|
| 2011-present | Assistant Professor Utrecht University, Faculty of Science, Biomolecular Mass Spectrometry and Proteomics |
| 2007-2011 | Post-doctoral fellow, Utrecht University, Faculty of Science, Biomolecular Mass Spectrometry and Proteomics, in the group of Prof. Albert Heck |
| 2002-2007 | Doctoral Research on Imaging Mass Spectrometry, FOM-institute for atomic and molecular physics (AMOLF), Macromolecular Ion Physics, with Dr Sander Piersma and Prof. Ron Heeren |

Other functions:

2007-current - Analytical Research Manager, Netherlands Proteomics Center
Assessment and supervision of the NPC UU-analytical Hotel projects

2011-current - PrimeXS editor for the access site Utrecht
Assessment and supervision of the PrimeXS proteomics projects performed in Utrecht

2011-current - Member of the board of the Dutch Society for Mass Spectrometry (NVMS)

Research Keywords: quantitative proteomics, signaling, protein interaction networks, posttranslational modifications

Theme: neuroscience, cancer

Offering: state-of-the-art proteomics technologies with emphasis on quantification and posttranslational modifications

Looking for: biological (model) systems

Selected Recent Publications:

1. Altelaar AFM, Heck AJR, Trends in ultrasensitive proteomics. *Curr Opin Chem Biol*, in press.
2. Altelaar AFM, Navarro D, Boekhorst J, van Breukelen B, Snel B, Mohammed S, Heck AJR, Database independent proteomics analysis of the ostrich and human proteome. *Proc. Nat. Acad. Sciences USA* 2011, in press
3. De Vos D, Frederiks F, Terweij M, Van Welsem T, Verzijlbergen KF, Iachina E, de Graaf EL, Altelaar AFM, Oudgenoeg G, Heck AJR, Krijgsveld J, Bakker BM, van Leeuwen F. Progressive methylation of ageing histones by Dot1 functions as a timer. *EMBO Rep* 2011, 12(9) 956-62.
4. Altelaar AFM, Mohammed S, Brans MAD, Adan RAH, Heck AJR. Improved identification of endogenous peptides from murine nervous tissue by multiplexed peptide extraction methods and multiplexed mass spectrometric analysis. *J Prot Res* 2009, 8 870-876.
5. Wijte D, Van Baar BLM, Heck AJR, Altelaar AFM. Probing the proteome response to toluene exposure in the solvent tolerant *Pseudomonas putida* S12. *J Prot Res* 2011;10(2):394-403.

Marc Baldus

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Education and Experience

2008-present	Full Professor of Structural Biology, Dept. of Chemistry, Utrecht University
2000-2008	Tenured Group Leader /Associate Professor, Max-Planck Institute for Biophysical Chemistry, Gottingen/Germany
1999-2000	Assistant Professor, Leiden University
1997-1999	Postdoctoral research associate, MIT/Harvard Center of Magnetic Resonance, M.I.T./ USA

Other functions: Head, Section NMR, UU

Research Keywords: NMR, Membrane proteins, Protein Folding and aggregation, cellular NMR, Biomaterials, Drug delivery systems

Themes: all

Offering: NMR spectroscopic studies as well as data analysis for structure elucidation under in-vitro and under cellular conditions

Looking for: biological targets in our themes & their functional characterization

Selected Publications:

1. Kaplan, M, Cukkemane, A, Van Zundert, GCP, Narasimhan, S, Daniëls, M, Mance, D, Waksman, G, Bonvin, AMJJ, Fronzes, R, Folkers, GE & Baldus, M **(2015)**: Probing a cell-embedded megadalton protein complex by DNP-supported solid-state NMR, *Nature Methods*, 12, 649-652.
2. Renault, M.; Tommassen-van Boxtel, R.; Bos, M.P.; Post, J.A.; Tommassen, J.; Baldus, M. **(2012)**: Cellular solid-state Nuclear Magnetic Resonance spectroscopy, *Proc. Natl. Acad. Sci. U.S.A.*, 109, 4863-4868.
3. Poyraz, Ö.; Schmidt, H.; Seidel, K.; Delissen, F.; Ader, C., Tenenboim, H.; Goosmann, C., Laube, B.; Thünemann, A.F.; Zychlinsky, A.; Baldus, M.; Lange, A.; Griesinger, C.; Kolbe, M. **(2010)**: Protein Refolding is Required for Assembly of the Type Three Secretion Needle, *Nature Struct. Mol. Biol.*, 17, 788-792
4. Ader, C.; Schneider, R.; Hornig, S.; Velisetty, P.; Wilson, E. M.; Lange, A.; Giller, K.; Ohmert, I.; Martin-Eauclaire, M. F., Trauner, D.; Becker, S.; Pongs, O.; and Baldus, M. **(2008)**: A Structural Link between Inactivation and Inhibition of a K⁺ channel *Nature Struct. Mol. Biol.*, 15, 605-612.
5. Lange, A.; Giller, K.; Hornig, S.; Martin-Eauclaire, M.F.; Pongs, O.; Becker, S.; Baldus, M. **(2006)**: Toxin-induced conformational changes in the selectivity filter of a Potassium channel revealed by solid-state NMR, *Nature*, 440, 959-962.

Paul MP van Bergen en Henegouwen
Cell Biology, Science Faculty, Department of Biology
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Education and Experience

2000-present	Associate professor, Cell Biology, Department of Biology, Utrecht University
1994-2000	Assistant professor, Molecular Cell Biology, Department of Biology, Utrecht University
1993-1994	Postdoctoral fellow with H. Hanafusa, Rockefeller University, New York
1992-1993	Postdoctoral fellow with H. Chap, INSERM U326, Toulouse
1986-1992	Postdoctoral fellow with A. Verkleij Utrecht University
1981-1985	PhD Molecular Biology with HO Voorma Utrecht University
1973-1980	Biology, University of Amsterdam

Other functions: Programme leader MSc Molecular & Cellular Life Sciences

Research Keywords: EGF, EGFR, nanobodies, VHH, microscopy

Theme: cancer

Offering: Nanobody selection and production, light microscopical techniques

Looking for: collaboration

Selected Recent Publications:

1. Talelli, M., Rijcken, J.F., Oliveira, S., Van Meel, R., van Bergen en Henegouwen, P.M.P., Lammers, T., van Nostrum F., Storm, G. And Hennink, W.E. (2011) Nanobody – shell functionalized thermosensitive core-crosslinked polymer micelles for active drug targeting. *Journal of Control. Release* 151: 183-192.
2. Oliveira, S., van Dongen, G.A.M.S., Stigter-van Walsum, M., Roovers, R.C., Stam, J.C., Mali, W., van Diest, P.J., and van Bergen en Henegouwen, P.M.P. (2011) Rapid visualization of human tumor Xenografts through Optical Imaging with a Near-infrared fluorescent anti-EGFR Nanobody. *Molecular Imaging*
3. Roovers, R.C., Vosjan, M.W.J.D., Laeremans, T., de Bruin, R.C.G. Ferguson, K.M., Verkleij, A.J., van Dongen, G.A.M.S., and van Bergen en Henegouwen, P.M.P. (2011) A bi-paratopic anti-EGFR nanobody efficiently inhibits solid tumour growth. *Int. J. Cancer* doi: 10.1002/ijc.26145
4. Low-Nam ST, Lidke KA, Cutler PJ, Roovers RC, van Bergen en Henegouwen PMP, Wilson BS, and Lidke DS. (2011) Visualization of ErbB1 Dimers: Ligand-induced Stability and Repeated Encounters in Domains. *Nat Struct Mol Biol.* 18:1244-1249.
5. Emmerson, C.D., van der Vlist, E.J., Braam, M.R., Vanlandschoot, P., Merchiers, P., de Haard, H.J.W., Verrips, C.T., van Bergen en Henegouwen, P.M.P., and Dolk, E. (2011) Enhancement of polymeric immunoglobulin receptor transcytosis by biparatopic VHH. *Plos One.* 6(10):e26299.

Celia R. Berkers

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Department of Chemistry

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Education and Experience

2013-present	Assistant professor Metabolomics, Department of Chemistry, Utrecht University
2011-2013	Rubicon fellow in the group of Prof. K.H. Vousden, Beatson Institute for Cancer Research, Glasgow, UK
2010-2011	Postdoctoral fellow, Netherlands Cancer Institute
2004-2010	PhD Chemical Biology, Netherlands Cancer Institute (with Prof. H. Ovaa)

Other functions: -

Research Keywords: Metabolomics, drug profiling, cancer metabolism, immunometabolism

Theme: immunology, cancer

Offering: Metabolomics and stable-isotope metabolic flux technologies to study both drug resistance and fundamental aspects of cell metabolism.

Looking for: Interesting collaborations

Selected Recent Publications:

1. Berkers, C.R., de Jong, A., Schuurman, K.G., Linnemann, C., Meiring, H.D., Janssen, L., Neefjes, J.J., Schumacher, T.N., Rodenko, B., Ovaa, H. Definition of Proteasomal Peptide Splicing Rules for High-Efficiency Spliced Peptide Presentation by MHC Class I Molecules. *J. Immunol.* 195, 4085-95 (2015).
2. Berkers, C.R., de Jong, A., Schuurman, K.G., Linnemann, C., Geenevasen, J.A., Schumacher, T.N., Rodenko, B., Ovaa, H. Peptide Splicing in the Proteasome Creates a Novel Type of Antigen with an Isopeptide Linkage. *J. Immunol.* 195, 4075-84 (2015).
3. Berkers, C.R., Maddocks, O.D., Cheung, E.C., Mor, I., Vousden, K.H. Metabolic Regulation by p53 Family Members. *Cell Metab.* 18, 617-33 (2013).
4. Maddocks, O.D., Berkers, C.R., Mason, S.M., Zheng, L., Blyth K., Gottlieb, E., Vousden, K.H. Serine starvation induces stress and p53-dependent metabolic remodelling in cancer cells. *Nature* 493, 542-546 (2013).
5. Berkers, C.R., Leestemaker, Y., Schuurman, K.G., Ruggeri, B., Jones-Bolin, S., Williams, M., Ovaa, H. Probing the specificity and activity profiles of the proteasome inhibitors bortezomib and delanzomib. *Mol. Pharm.* 9, 1126-1135 (2012).

Rolf Boelens

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Education and Experience

1997-present	Full professor in Biomolecular NMR Spectroscopy, Utrecht University
1990-1997	Associate professor, Utrecht University
1987-1990	Assistant professor, Utrecht University
1982-1987	Postdoc, Univ. Groningen
1982-1987	PhD Biochemistry, Faculty of Science, Univ. Amsterdam (supervisors Prof. BF van Gelder and Dr. R Wever)

Other functions: MC EU BioNMR and EASTNMR, adv. board F1000, FEBS J, J Biomol NMR, Curr Prot Pep. Sci, organizer EMBO Advanced NMR School,

Research Keywords: protein dynamics, transcription, DNA repair, epigenetics, protein-DNA and ubiquitination complexes

Theme: stem cell development, cancer

Offering: biomolecular NMR

Looking for: targets in epigenetics, transcription complexes, DNA repair

Selected Recent Publications:

1. M Putker, T Madl, HR Vos, H de Ruiter, M Visscher, MCW van den Berg, M Kaplan, HC Korswagen, R Boelens, M Vermeulen, BMT Burgering and TB Dansen (2013), Redox-Dependent Control of FOXO/DAF-16 by Transportin-1, *Molecular Cell*, in press
2. D Das, GE Folkers, M van Dijk, NGJ Jaspers, JHJ Hoeijmakers, R Kaptein, and R Boelens (2012), The structure of the XPF helix-hairpin-helix domain bound to single strand DNA. A model for the binding of XPF/ERCC1 at a ss/ds DNA junction, *Structure* 20, 667-75
3. RG Hibbert, A Huang, R Boelens and TK Sixma (2011), E3 ligase Rad18 promotes monoubiquitination rather than ubiquitin chain formation by E2 enzyme Rad6. *Proceedings of the National Academy of Sciences USA* 108, 5590-5
4. H van Ingen, FMA van Schaik, H Wienk, J Ballering, H Rehmann, AC Dechesne, JAW Kruijzer, RMJ Liskamp, HTM Timmers and R Boelens (2008), Structural Insight into the Recognition of the H3K4me3 mark by the TFIID subunit TAF3, *Structure* 16, 1245-56
5. P Milon, E Tischenko, J Tomsic, E Caserta, GE Folkers, A La Teana, MV Rodnina, CL Pon, R Boelens and CO Gualerzi (2006), "The nucleotide-binding site of bacterial translation initiation factor 2 (IF2) as a metabolic sensor", *Proc Natl Acad Sci U S A* 103, 13962-7

Antonius de Boer

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Education and Experience

1992-present	Associate and full (2001) Professor of Pharmacotherapy, Department of Pharmaceutical Sciences, Utrecht University, Epidemiologist (1994), Clinical Pharmacologist (1996)
1990-1992	Assistant Professor of Clinical Epidemiology, Academic Hospital Leiden
1985-1990	PhD in Clinical Pharmacology, Center for Human Drug Research, Leiden University
1982-1985	Resident Internal Medicine, Elizabeth Hospital, Leiderdorp

Other functions: Member of the Drug Committee (CG-WAR) of the Health Institute of the Netherlands (ZIN), chairman of the Board of the National Institute of Post-Academic Education of Pharmacy, secretary and treasurer of the Dutch Society of Clinical Pharmacology and Biopharmacy, vice-chair of the ZonMW Committee "Goed Gebruik Geneesmiddelen".

Research Keywords: Pharmacogenetics, methods in pharmacoepidemiology, rational pharmacotherapy

Theme: cardiovascular, infection, cancer

Offering: statistical epidemiological analysis techniques

Looking for: improved statistical adjustment for confounding, explanation of variability in drug effects

Selected Recent Publications:

1. Groenwold RHH, de Vries F, de Boer A, Pestman WR, Rutten FH, Hoes AW, Klungel OH. Balance measures for propensity score methods: a clinical example on beta-agonist use and the risk of myocardial infarction *Pharmacoepidemiol Drug Saf* 2011;20:1130-7
2. Wangge G, Klungel OH, Roes KC, de Boer A, Hoes AW, Knol MJ. Room for improvement in conducting and reporting non-inferiority randomized controlled trials on drugs: a systematic review. *PLoS One*. 2010 Oct 27;5(10):e13550.
3. Bardai A, Amin AS, Blom MT, Bezzina CR, Berdowski J, Langendijk PN, Beekman L, Klemens CA, Souverein PC, Koster RW, de Boer A, Tan HL. Sudden cardiac arrest associated with use of a non-cardiac drug that reduces cardiac excitability: evidence from bench, bedside, and community. *Eur Heart J*. 2013 May;34(20):1506-16
4. Harmsze AM, van Werkum JW, Souverein PC, Breet NJ, Bouman HJ, Hackeng CM, Ruven HJ, Ten Berg JM, Klungel OH, de Boer A, Deneer VH. Combined influence of proton-pump-inhibitors, calcium-channel-blockers and CYP2C9*2 on on-treatment platelet reactivity and on the occurrence of atherothrombotic events after percutaneous coronary intervention. *J Thromb Haemost*. 2011;9:1892-901
5. *Van den Hoek H, Bos WJW, De Boer A, Van de Garde EW.* Statins and prevention of infections: systematic review and meta-analysis of data from large randomised placebo controlled trials. *BMJ* 2011;343:d7281 doi: 10.1136/bmj.d7281

Rob J. de Boer

Theoretical Biology, Faculty of Science, Department of Biology

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Education and Experience

2009-present	Prof. Theoretical Biology, Department of Biology, Utrecht University
2004-2009	Prof. Theoretical Immunology, Department of Biology, Utrecht University
1991-2004	Faculty member, Department of Biology, Utrecht University
1989-1991	Postdoctoral fellow, Los Alamos National Laboratory, USA
1985-1989	PhD student, Theoretical Biology & Bioinformatics, Department of Biology, Utrecht University

Other functions: Member external faculty Santa Fe Institute (1992-present); Deputy editor PLOS Computational Biology

Research Keywords: immunology, mathematical modeling, bioinformatics, cell migration, HIV, T cell repertoires.

Theme: computational immunology

Offering: mathematical modeling & immuno-informatics

Looking for: quantitative data in immunology

Selected Recent Publications:

1. Perié L, Duffy KR, Kok L, **de Boer RJ**, Schumacher TN. The Branching Point in Erythro-Myeloid Differentiation. *Cell*. 2015 Dec 17;163(7):1655-62.
2. Ariotti S, Beltman JB, Borsje R, Hoekstra ME, Halford WP, Haanen JB, **de Boer RJ**, Schumacher TN. Subtle CXCR3-Dependent Chemotaxis of CTLs within Infected Tissue Allows Efficient Target Localization. *J Immunol*. 2015 Dec 1;195(11):5285-95.
3. Niculescu I, Textor J, **de Boer RJ**. Crawling and Gliding: A Computational Model for Shape-Driven Cell Migration. *PLoS Comput Biol*. 2015 Oct 21;11(10):e1004280.
4. Vrisekoop N, Drylewicz J, Van Gent R, Mugwagwa T, Van Lelyveld SF, Veel E, Otto SA, Ackermans MT, Vermeulen JN, Huidekoper HH, Prins JM, Miedema F, **de Boer RJ**, Tesselaar K, Borghans JA. Quantification of naive and memory T-cell turnover during HIV-1 infection. *AIDS*. 2015 Oct 23;29(16):2071-80.
5. Westera L, van Hoeven V, Drylewicz J, Spierenburg G, van Velzen JF, **de Boer RJ**, Tesselaar K, Borghans JA. Lymphocyte maintenance during healthy aging requires no substantial alterations in cellular turnover. *Aging Cell*. 2015 Apr;14(2):219-27.
6. van Dorp CH, van Boven M, **de Boer RJ**. Immuno-epidemiological modeling of HIV-1 predicts high heritability of the set-point virus load, while selection for CTL escape dominates virulence evolution. *PLoS Comput Biol*. 2014 Dec 18;10(12):e1003899.
7. Perié L, Hodgkin PD, Naik SH, Schumacher TN, **de Boer RJ**, Duffy KR. Determining lineage pathways from cellular barcoding experiments. *Cell Rep*. 2014 Feb 27;6(4):617-24.
8. Naik SH, Perié L, Swart E, Gerlach C, van Rooij N, **de Boer RJ**, Schumacher TN. Diverse and heritable lineage imprinting of early haematopoietic progenitors. *Nature*. 2013 Apr 11;496(7444):229-32. doi: 10.1038/nature12013.
9. Gerlach C, Rohr JC, Perié L, van Rooij N, van Heijst JW, Velds A, Urbanus J, Naik SH, Jacobs H, Beltman JB, **de Boer RJ**, Schumacher TN. Heterogeneous differentiation patterns of individual CD8+ T cells. *Science*. 2013 May 3;340(6132):635-9.
10. Pandit A, **de Boer RJ**. HIV-1 CCR5 gene therapy will fail unless it is combined with a suicide gene. *Sci Rep*. 2015 Dec 17;5:18088.

Debby Bogaert

Pathogenesis and Prevention of Respiratory Infections, UMC Utrecht-WKZ,
Department of Pediatric Infectious Diseases & Immunology
d.bogaert@umutrecht.nl



Education and Experience

2008-present	Assistant Professor, Department of Pediatric Infectious Diseases & Immunology, UMC Utrecht
2006-present	Pediatrician, Department of Pediatric Infectious Diseases & Immunology, UMC Utrecht
2006-2008	Postdoctoral fellow (with Prof. dr. M. Lipsitch and Prof. dr. R. Malley), Harvard School of Public Health/children's Hospital, Boston
1999-2006	Resident Pediatrics and PhD student Pediatric Infectious Diseases within the framework of an AGIKO training program, Erasmus MC-Sophia, Rotterdam

Other functions:

Research Keywords: (molecular) epidemiology, respiratory infections, respiratory health, microbial colonization, microbiota, host-responses, vaccination, prevention

Theme: infection, immunology

Offering: Epidemiological and clinical study materials, Molecular epidemiology (especially microbial community profiling and analyses), Host-pathogen interaction models

Looking for: biological components and targets driving respiratory (microbiome) health

Selected Recent Publications:

1. Biesbroek G., E.A.M. Sanders, Wang X., Trzciński K., Ouwens A.M.T., B.J.F.Keijser, D. Bogaert. In Depth Sequencing Analyses of Low Density Microbial Communities: Working at the boundary of accurate microbiota detection. PLoS One. 2011, accepted.
2. Bogaert, D, B.J.F. Keijser, S.M. Huse, J.W. Rossen, R.H. Veenhoven, E.J.M. van Gils, J.P. Bruin, R.C.M. Montijn, M.J.M. Bonten, E.A.M. Sanders. Variability and diversity of nasopharyngeal microbiota: a metagenomic analysis. PLoS One. 2011, 28;6(2):e17035.
3. van Gils EJ, Hak E, Veenhoven RH, Rodenburg GD, Bogaert D, Bruin JP, van Alphen L, Sanders EA. Effect of Seven-Valent Pneumococcal Conjugate Vaccine on Staphylococcus aureus Colonisation in a Randomised Controlled Trial. PLoS One. 2011;6(6):e20229. Epub 2011 Jun 10.
4. van Gils, E.J.M. R.H. Veenhoven, E. Hak, G.D. Rodenburg, W.C.M. Keijzers, D. Bogaert, K. Trzcinski, J.P. Bruin, L.van Alphen, A. van der Ende and E.A.M. Sanders. Pneumococcal conjugate vaccination and nasopharyngeal acquisition of serotype 19A strains. JAMA. 2010;304[10]:1099-1106.
5. Bogaert D., D. Weinberger, C. Thompson, M. Lipsitch and R. Malley. Intranasal whole cell pneumococcal vaccine protects neonatal mice against pneumococcal colonization despite immature cytokine responses to *Streptococcus pneumoniae*. Inf Immun. 2009 Apr;77(4):1613-22.
6. Lu Y., J. Gross, Bogaert D, A. Finn, L. Bagrae, Q. Zhang, J. Kolls, A. Srivastava, S. Forte, C.M. Thompson, K.F. Harney, P.W. Anderson, M. Lipsitch and R. Malley. Interleukin-17A mediates acquired immunity to pneumococcal colonization. 2008 PloS pathogens; Sep 19;4(9):e1000159.

Alexandre M.J.J. Bonvin

Computational Structural Biology / NMR, Faculty of Science, Chemistry

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<http://bonvinlab.org>

<http://www.uu.nl/staff/AMJJBonvin>

<http://haddock.science.uu.nl>



Education and Experience

2009-present	Full professor in Computational Structural Biology
2003-2009	Associate professor, UU chemistry
1998-2003	Assistant professor, UU chemistry
1996-1998	Postdoc, ETHZ Switzerland
1994-1996	Postdoc, Yale University, USA
1990-1995	PhD in Chemistry "cum laude", Utrecht University (supervisors Prof. R. Kaptein and Prof. R. Boelens)

Other functions: Associate editor of Proteins and Protein Engineering, Design, and Selection. Coordinator of the MoBrain Competence Center under the EGI-Engage H2020 project.

Research Keywords: Biomolecular modeling; docking; biomolecular interactions; protein structure and dynamics; molecular dynamics; NMR; structural molecular biology

Theme: all

Offering: Expertise in computational structural biology, biomolecular docking, structural bioinformatics, molecular dynamics, protein modelling, computational resources.

Looking for: Collaborations, experimental data on biomolecular interactions, biological systems with open structural questions.

Selected Recent Publications:

1. A Vangone and A.M.J.J. Bonvin (2015). Contacts-based prediction of binding affinity in protein-protein complexes. *eLife* **4**, e07454.
2. G.C.P. van Zundert, A.S.J. Melquiond and A.M.J.J. Bonvin (2015). Integrative modeling of biomolecular complexes: HADDOCKing with Cryo-EM data. *Structure* **23**, 949-960.
3. T.A. Hopf#, C.P.I. Schärfe#, J.P.G.L.M. Rodrigues#, A.G. Green, O. Kohlbacher, C. Sander*, A.M.J.J. Bonvin* and D.S. Marks* (2014). Sequence co-evolution gives 3D contacts and structures of protein complexes. *eLife* **3** e03430.
4. P.L. Kastritis, J.P.G.L.M Rodrigues, G.E. Folkers, R. Boelens and A.M.J.J. Bonvin (2014). Proteins feel more than they see: Fine-tuning of binding affinity by properties of the non-interacting surface. *J. Mol. Biol.* **426**, 2632-2652.
5. T. Schneider, Th. Kruse, R. Wimmer, I. Wiedemann, V. Sass, U. Pag, A. Jansen, A.K. Nielsen, P.H. Mygind, D.S. Raventós, S. Neve, B. Ravn, A.M.J.J. Bonvin, L. De Maria, L. Kamenova, H.-G. Sahl and H.-H. Kristensen (2010). Plectasin, a fungal defensin antibiotic peptide, targets the bacterial cell wall precursor Lipid II. *Science*, **328**, 1168-1172.
6. S.J. de Vries, M. van Dijk and A.M.J.J. Bonvin (2010). The HADDOCK web server for data-driven biomolecular docking. *Nature Protocols*, **5**, 883-897.

Geert-Jan Boons

Department of Biological Chemistry and drug Design, Faculty of Science,

Department of Pharmaceutical Sciences and Chemistry

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Website



Education and Experience

2015-present	Full professor in Chemical Biology, Utrecht University
2004-present	Franklin Professor of Chemistry, Franklin College of Arts and Sciences, University of Georgia, Athens, Georgia
1999 -2004	Full professor of Chemistry, Franklin College of Arts and Sciences, University of Georgia, Athens, Georgia
1997-1999	Full professor in Bioorganic Chemistry, University of Birmingham, UK
1993 - 1997	Lecturer in Bioorganic Chemistry, University of Birmingham, UK
1991-1993	Postdoc in synthetic Chemistry, Imperial College (London) and University of Cambridge, UK in the research group of Prof. Steven V. Ley
1989-1991	Ph.D. in Chemistry, Leiden University (supervisors Prof. Jacques H. van Boom)

Other functions: Editorial board of *Carbohydrate Chemistry*, and *European Journal of Organic chemistry*; Treasurer, American Chemical Society (ACS) Carbohydrate (CARB) Division; Member of the Scientific Advisory Board, Alberta Ingenuity Centre for Carbohydrate Science (AICCS), Canada; Member of Scientific Advisory Board, Institute for Chemical Immunology (ICI), The Netherlands; Member National Academy of Sciences (NAS) Task Group on Assessing the Importance of Glycomics and Glycosciences; Steering committee member, Consortium for Functional Glycomics; Member of the PE5–Synthetic chemistry and materials starting grant evaluation panel of the European Research Council.

Research Keywords: Glycoscience, prophylactic and therapeutic vaccines, infection, chemical synthesis

Theme: science of life, immunology, infection, cancer

Offering: chemical synthesis, biomolecular interactions, cell biology

Looking for: biological problems in which complex glycoconjugates play key roles

Selected Recent Publications:

1. Li, X., T. Fang, and G.J. Boons. 2014. Preparation of well-defined antibody–drug conjugates through glycan remodeling and strain-promoted azide–alkyne cycloadditions. *Angew. Chem. Int. Ed.* **53**(28): 7179–7182
2. Wang, Z., Z. Chinoy, S. Ambre, W. Peng, R. McBride, R.P. de Vries, J. Glushka, J.C. Paulson, and G.J. Boons. 2013. A general strategy for the chemoenzymatic synthesis of asymmetrically branched *N*-glycans. *Science* **341**(6144): 379–383
3. Lakshminarayanan, V., P. Thompson, M.A. Wolfert, T. Buskas, J.M. Bradley, L.B. Pathangey, C.S. Madsen, P.A. Cohen, S.J. Gendler, and G.J. Boons. 2012. Immune recognition of tumor-associated mucin MUC1 is achieved by a fully synthetic aberrantly glycosylated MUC1 tripartite vaccine. *Proc. Natl. Acad. Sci. U. S. A.* **109**(1): 261–266
4. Teo C.F., S. Ingale, M.A. Wolfert, G.A. Elsayed, L.G. Nöt, J.C. Chatham, L. Wells, and G.J. Boons. 2010. Glycopeptide-specific monoclonal antibodies suggest new roles for *O*-GlcNAc. *Nat. Chem. Biol.* **6**(5): 338–343
5. Boltje, T.J., J.H. Kim, J. Park, and G.J. Boons. 2010. Chiral-auxiliary-mediated 1,2-*cis*-glycosylations for the solid-supported synthesis of a biologically important branched α -glucan. *Nat. Chem.* **2**(7): 552–557

Mike Boxem

Developmental Biology, Utrecht University

m.boxem@uu.nl



Education and Experience

2008-present	Assistant Professor, Biology, Utrecht University
2005-2008	Instructor, Massachusetts General Hospital, Boston, USA
2002-2005	Postdoctoral Fellow in the group of Prof. Marc Vidal, Dana Farber Cancer Institute, Boston, USA
1997-2002	Ph.D. student at Massachusetts General Hospital, Boston, USA

Research Keywords: Protein Interaction Mapping, *C. elegans*, affinity purification, yeast two-hybrid

Theme: cell polarity

Offering: yeast two-hybrid, CRISPR/Cas9, and *C. elegans* experience

Looking for: mammalian polarity models

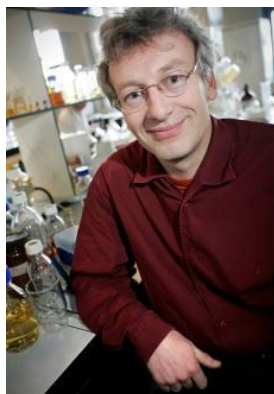
Selected Recent Publications:

1. Koorman T, Klompstra D, Van der Voet M, Lemmens I, Ramalho JJ, Nieuwenhuize S, Van den Heuvel S, Tavernier J, Nance J, Boxem M. A combined binary interaction and phenotypic map of *C. elegans* cell polarity proteins. *Nature Cell Biology* 2016, in press.
2. Waaijers S, Ramalho JJ, Koorman T, Kruse E, Boxem M. The *C. elegans* Crumbs family contains a CRB3 homolog and is not essential for viability. *Biol. Open*. 2015 Feb 6.
3. Waaijers S, Boxem M. Engineering the *Caenorhabditis elegans* genome with CRISPR/Cas9. *Methods*. 2014 Aug 1;68(3):381-8.
4. Waaijers S, Portegijs V, Kerver J, Lemmens BB, Tijsterman M, van den Heuvel S, Boxem M. CRISPR/Cas9-Targeted Mutagenesis in *Caenorhabditis elegans*. *Genetics*. 2013 Aug 26.
5. S. Waaijers*, T. Koorman*, J. Kerver, M. Boxem. Identification of human protein interaction domains using an ORFeome-based yeast two-hybrid fragment library. *J. Prot. Res.* 2013 Jul 5;12(7):3181-92. *These authors contributed equally.

Eefjan Breukink, PhD

Dept Membrane Biochemistry & Biophysics, Faculty of Science

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Education and Experience

2003-present	UHD, Membrane Biochemistry & Biophysics, Utrecht University
2000-2003	Post-Doc, Utrecht University
1999-2000	Post-Doc, University of Oxford
1995-1999	Post-Doc, Utrecht University

Other functions: none

Research Keywords: Antibiotics, bacterial envelopes, Lama-antibodies

Theme: infection & cancer

Offering: Screening assays for antibiotics working at the level of the bacterial cell envelope biosynthesis pathways

Looking for: candidates for a PhD position

Selected Recent Publications:

1. Gray A.N., Egan A.J., van 't Veer I.L., Verheul J., Colavin A., Koumoutsis A., Biboy J., Altelaar M.A., Damen M.J., Huang K.C., Simorre J.P., Breukink E., den Blaauwen T., Typas A., Gross C.A., Vollmer W. (2015) Coordination of peptidoglycan synthesis and outer membrane constriction during *Escherichia coli* cell division. *Elife*. May 7;4. doi: 10.7554/eLife.07118
2. Oppedijk, S.F., Martin, N.I. and Breukink, E. (2015) Hit 'em where it hurts: The growing and structurally diverse family of peptides that target Lipid-II. *BBA* doi: 10.1016/j.bbamem.2015.10.024.
3. te Welscher YM, van Leeuwen MR, de Kruijff B, Dijksterhuis J, Breukink E. (2012) Polyene antibiotic that inhibits membrane transport proteins. *Proc Natl Acad Sci USA* 109:11156-11159.
4. Mohammadi, T., van Dam, V., Sijbrandi, R., Vernet, T., Zapun, A., Bouhss, A., Diepeveen-de Bruin, M., Nguyen-Distèche, M., de Kruijff, B. and Breukink, E. (2011) Identification of FtsW as a transporter of lipid-linked cell wall precursors across the membrane. *EMBO J.* 30:1425-1432. Highlighted in *Nature Reviews Microbiology* May 2011.
5. Typas, A., Banzhaf, M., van Sapperoo, B.V., Verheul, J., Biboy, J., Nichols, R.J., Zietek, M., Beilharz, K., Kannenberg, K., von Rechenberg, M., Breukink, E., den Blaauwen, T., Gross, C.A. and Vollmer, W. (2010) Regulation of Peptidoglycan Synthesis by Outer-Membrane Proteins. *Cell*, 143, 1097-1109.

Laura Creemers

Orthopaedic Research Lab, Department of Orthopaedics, Division of Surgical Specialties, UMCU

l.b.creemers@umcutrecht.nl

Education and experience



2006-now	Assistant and Associate professor. Degeneration and regeneration of articular cartilage and intervertebral disc. Dept Orthopaedics, UMC Utrecht.
2003-2006	Post-doc. Dept Orthopaedics, UMC Utrecht
2002-2003	Senior Scientist Assay Development. Macrozyme BV, Amsterdam
1998-2002	Postdoc. Department of Cell Biology and Histology, UMC Utrecht
1997-1998	Postdoc. Department of Human Metabolism and Clinical Biochemistry, University of Sheffield, Sheffield, UK
1992-1997	PhD Thesis Department of Parodontology, ACTA, Amsterdam
1985-1991	Biomedical Sciences, RUL, Leiden
1984-1985	Biology, UU, Utrecht

Research Keywords: articular cartilage, intervertebral disc, inflammation, controlled release, RNAi, epigenetics (miRNA), biomaterials, regeneration, imaging

Theme: regenerative medicine

Offering: in vitro and animal models for cartilage (cartilage trauma, osteoarthritis) and disc degeneration (low back pain), access to patient populations

Looking for: miRNA and RNAi transfection tools, targeting options, bioactive and biocompatible materials for cell and compound delivery, high-throughput proteomics, synthetic inhibitors (proteases, cytokine signalling)

Selected Recent Publications:

1. Willems N, Yang HY, Langelaan ML, Tellegen AR, Grinwis GC, Kranenburg HJ, Riemers FM, Plomp SG, Craenmehr EG, Dhert WJ, Papen-Botterhuis NE, Meij BP, Creemers LB, Tryfonidou MA. Biocompatibility and intradiscal application of a thermoreversible celecoxib-loaded poly-N-isopropylacrylamide MgFe-layered double hydroxide hydrogel in a canine model. *Arthr Res Ther* 2015 Aug 20;17(1):214
2. Yang HY, van Ee R, Timmer K, Craenmehr EGM, Huang JH, Öner FC, Dhert WJA, Kragten AHM, Willems N, Grinwis G, Tryfonidou MA, Papen-Botterhuis NE, Creemers LB. A novel injectable thermoresponsive and cytocompatible gel of poly (N-isopropylacrylamide) with layered double hydroxides facilitates siRNA delivery into chondrocytes in 3D culture. *Acta Biomaterialia* 2015 Sep 1;23:214-28
3. Krouwels A, Popov-Celeketic J, Plomp SG, Dhert WJ, Öner FC, Bank RA, Creemers LB. No effects of Hyperosmolar Culture medium on Tissue Regeneration by Human Degenerated Nucleus Pulposus Cells despite Upregulation Extracellular Matrix Genes. *Spine (Phila Pa 1976)*. 2015 Apr 8
4. Yang HY, van Dijk M, Licht R, Beekhuizen M, van Rijen M, Janstål MK, Öner FC, Dhert WJ, Schumann D, Creemers LB Applicability of a Newly Developed Bioassay for Determining Bioactivity of Anti-Inflammatory Compounds in Release Studies - Celecoxib and Triamcinolone Acetonide Released from Novel PLGA-Based Microspheres. *Pharm Res*. 2015 Feb;32(2):680-90.
5. Vonk LA, Kragten AH, Dhert WJ, Saris DB, Creemers LB. Overexpression of hsa-miR-148a promotes cartilage production and inhibits cartilage degradation by osteoarthritic chondrocytes. *Osteoarthritis Cartilage*. 2014 Jan;22(1):145-53

Edwin Cuppen

Human Genetics, Division Biomedical Genetics, University Medical Center Utrecht
ecuppen@umcutrecht.nl <http://www.umcutrecht.nl/genetics>



Education and Experience

2009-present	Professor of Human Genetics, Department of Medical Genetics, Center for Molecular Medicine
May 2015-present	Manager Research and Education Division of Biomedical Genetics, Director Center for Molecular Medicine, University Medical Center Utrecht, The Netherlands
2009- 2015	Head of Research, Department of Medical Genetics, Center for Molecular Medicine
2005-2015	Principle Investigator (tenured) at the Hubrecht Institute for Developmental Biology and Stem Cell Research, Netherlands Royal Academy of Arts and Sciences (KNAW), Utrecht
2007-2012	Professor of Genome Biology, Department of Biology, Faculty of Beta Sciences, Utrecht University
2002-2005	Junior Group leader / staff scientist at the Hubrecht Laboratory, Utrecht, The Netherlands
1999-2001	Post-doc in the Functional Genomics group of Prof. Dr. R.H.A. Plasterk at the Netherlands Cancer Institute, Section of Molecular Biology, Amsterdam, The Netherlands from January 1999 till February 2000 and the Netherlands Institute for Developmental Biology / Hubrecht lab, Utrecht, The Netherlands from March 2000 till December 2001
1995-1998	Ph.D. at the University of Nijmegen, Department of Cell Biology, Institute for Cellular Signaling and Faculty of Medical Sciences, The Netherlands (promoter: prof. dr. B. Wieringa; co-promoter: dr. W.J.A.J. Hendriks)
1994	Scientific co-worker in a research project at the Department of Cell Biology, Faculty of Medical Sciences, University of Nijmegen, Nijmegen, The Netherlands
1994	Undergraduate student internship at the Whitehead Institute for Biomedical Research, M.I.T., Cambridge, MA, USA, under supervision of Dr. P.W. Laird and Prof. R. Jaenisch.
1994	Student internship project at the Department of Cell Biology and Histology, Faculty of Medical Sciences, University of Nijmegen, The Netherlands, under supervision of Dr. G. Janssen and Prof. B. Wieringa.
1992-1993	Student internship at the Department of Molecular Biology, Agricultural University of Wageningen, The Netherlands, under supervision of Prof. A. van Kammen.
1988-1994	Bachelor and Master of Science, Agricultural University of Wageningen, The Netherlands. Molecular Sciences, chemical-biological orientation

Other functions:

- Co-founder and steering committee member of the Netherlands Center for Personalized Cancer Treatment, a national collaboration that aims for the stratification of cancer patients towards targeted treatments based on DNA measurements of the metastasized tumor.
- Director Hartwig Medical Foundation that focuses on providing population-scale medical whole genome sequencing and clinical data collection and integration for improving patient care.
- Scientific advisor for various biotech and genomics startup companies.

Research Keywords: Genomics, genetic variation, personalized medicine, cancer genomics, next-generation DNA sequencing, whole genome sequencing, personal genomes

Theme: stem cell development, cancer

Offering: Next-generation DNA sequencing technologies including targeted sequencing, whole exome and whole genome sequencing, transcriptome analysis (RNA-seq), epigenetic characterization (ChIP-seq), chromatin conformation assays, etc. including wet-lab and bioinformatic expertise

Looking for: effects of genetic variation under normal and disease conditions like cancer and congenital disease

Selected Recent Publications:

1. Prins P, de Ligt J, Tarasov A, Jansen RC, Cuppen E, Bourne PE (2015). Toward effective software solutions for big biology. **Nat Biotechnol.** 33(7):686-7
2. Huch M, Gehart H, van Boxtel R, Hamer K, Blokzijl F, Verstegen MM, Ellis E, van Wenum M, Fuchs SA, de Ligt J, van de Wetering M, Sasaki N, Boers SJ, Kemperman H, de Jonge J, Ijzermans JN, Nieuwenhuis EE, Hoekstra R, Strom S, Vries RR, van der Laan LJ, Cuppen E, Clevers H (2015). Long-term culture of genome-stable bipotent stem cells from adult human liver. **Cell** 160(1-2):299-312
3. Behjati S, Huch M, van Boxtel R, Karthaus W, Wedge DC, Tamuri AU, Martincorena I, Petljak M, Alexandrov LB, Gundem G, Tarpey PS, Roerink S, Blokker J, Maddison M, Mudie L, Robinson B, Nik-Zainal S, Campbell P, Goldman N, van de Wetering M, Cuppen E, Clevers H, Stratton MR (2014). Genome sequencing of normal cells reveals developmental lineages and mutational processes. **Nature**, 513(7518):422-5
4. van Heesch S, Simonis M, van Roosmalen MJ, Pillalamarri V, Brand H, Kuijk EW, de Luca KL, Lansu N, Braat AK, Menelaou A, Hao W, Korving J, Snijder S, van der Veken LT, Hochstenbach R, Knecht AC, Duran K, Renkens I, Alekozai N, Jager M, Vergult S, Menten B, de Bruijn E, Boymans S, Ippel E, van Binsbergen E, Talkowski ME, Lichtenbelt K, Cuppen E, Kloosterman WP (2014). Genomic and functional overlap between somatic and germline chromosomal rearrangements. **Cell Rep.**;9(6):2001-10.
5. Rat Genome Sequencing and Mapping Consortium (2013). From sequence to phenotype variation in the laboratory rat. Writing group: Baud A, Hermsen R, Guryev V, Gauguier D, Stridh P, Olsson T, Holmdahl R, Graham D, McBride MW, Foroud T, Fernandez-Teruel A, Hubner N, Cuppen E, Mott R, Flint J. Sequencing group: Hermsen R, Hummel O, Lansu N, Patone G, Ruzius FP, de Bruijn E, Hauser H, Atanur SS, Aitman TJ, Flicek P, Adams DJ, Keane T, Saar K, Hubner N, Guryev V, Cuppen E. **Nature Genetics**, 45:767-775
6. Kettleborough RNW*, Busch-Nentwich EM*, Harvey SA*, Dooley CM, de Bruijn E, van Eeden F, Sealy I, White RJ, Herd C, Nijman IJ, Fényes F, Mehroke S, Scahill C, Gibbons R, Wali N, Carruthers S, Hall A, Yen J, Cuppen E*, Stemple DL* (2013). A systematic genome-wide analysis of zebrafish protein-coding gene function. **Nature**, 496:494-497

David A. Egan

Cell Screening Center, Department of Cell Biology, UMCU

d.a.egan@umcutrecht.nl<http://www.cellbiology-utrecht.nl/facilities>**Education and Experience**

2008-present	Manager, Cell Screening Center, UMCU
2003-2008	Automation Scientist, NKI
2001- 2003	Assay Technology Scientist, OSI Pharmaceuticals, NY, USA
1997-2001	Postdoctoral Fellow, Salk Institute for Biomedical Sciences, La Jolla, CA, USA. Laboratory of Ronald M. Evans.
1991-1997	PhD, Cornell University, NY, USA. Laboratory of Kathleen W. Scotto, Memorial Sloan- Kettering Cancer Center, NY, NY.

Research Keywords: High Throughput Screening, High Content Analysis, Functional Genomics, Chemical Biology, Automated Microscopy, Informatics,

Theme: Cancer, Stem Cell Biology, Infectious Diseases, Systems Biology, Drug Discovery, Functional Genomics

Offering: High Throughput Screening, siRNA Libraries, Compound Libraries, Automated Microscopy, Assay Automation

Looking for: Screening Projects, Reagent Libraries, Assays, Bioinformatics Tools

Selected Recent Publications:

1. Information Architecture in High Throughput Screening, Omta WA, **Egan DA**, Spruit MR, Brinkkemper S, Procedia Technology, Volume 5, 2012, 696-705.
2. High-content screening of peptide-based non-viral gene delivery systems. de Raad M, Teunissen EA, Lelieveld D, **Egan DA**, Mastrobattista E. J Control Release.158:3 433-42, 2011.
3. A Genome-wide Multidimensional RNAi Screen Reveals Pathways Controlling MHC Class II Antigen Presentation. Paul P, van den Hoorn T, Jongsma ML, Bakker MJ, Hengeveld R, Janssen L, Cresswell P, **Egan DA**, van HAM M, Ten Brinke A, Ovaa H, Beijersbergen RL, Neefjes J. Cell 2011 April 15, 145:1-16
4. Boronic acid-based inhibitor of autotaxin reveals rapid turnover of LPA in the circulation. Albers HM, Dong A, van Meeteren LA, **Egan DA**, Sunkara M, van Tilburg EW, Schuurman K, van Tellingen O, Morris AJ, Smyth SS, Moolenaar WH, Ovaa H. Proc Natl Acad Sci U S A. 2010 Apr 20;107(16):7257-62.
5. A high throughput pharmaceutical screen identifies compounds with specific toxicity against BRCA2-deficient tumors. Evers B, Schut E, van der Burg E, Braumuller TM, **Egan DA**, Holstege H, Edser P, Adams DJ, Wade-Martins R, Bouwman P, Jonkers J. Clin Cancer Res. 2010 Jan 1;16(1):99-108.

Toine CG Egberts

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Pharmaceutical Sciences, Faculty of Science, Utrecht University
Clinical Pharmacy, Division Laboratories and Pharmacy, University Medical Center
Utrecht

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Education and Experience

2006-present	Full professor of clinical pharmacy and head department of clinical pharmacy University Medical Center Utrecht
2001-present	Full professor of clinical pharmacoepidemiology, department of pharmaceutical sciences, Faculty of Science, Utrecht University
1994-1997	PhD Pharmacoepidemiology, Utrecht University
1995-1996	Master of Science Clinical Epidemiology, Netherlands Institute of Health Sciences
1990-1994	Training hospital pharmacist Tilburg and Delft hospitals

Other functions:

Research Keywords: clinical pharmacy, clinical pharmacoepidemiology, biomarkers, benefit-harm balance, neuroscience, translational

Theme: neuroscience

Offering: research bridging drug evaluation and patient care

Looking for: mechanistic unraveling

Selected Recent Publications:

- 1: van den Broek MP, Huitema AD, van Hasselt JG, Groenendaal F, Toet MC, Egberts TC, de Vries LS, Rademaker CM. Lidocaine (lignocaine) dosing regimen based upon a population pharmacokinetic model for preterm and term neonates with seizures. *Clin Pharmacokinet* 2011;50:461-9.
- 2: Kleijer BC, Heerdink ER, Egberts TC, Jansen PA, van Marum RJ. Antipsychotic drug use and the risk of venous thromboembolism in elderly patients. *J Clin Psychopharmacol* 2010;30:526-30.
- 3: van Haelst IM, Egberts TC, Doodeman HJ, Traast HS, Burger BJ, Kalkman CJ, van Klei WA. Use of serotonergic antidepressants and bleeding risk in orthopedic patients. *Anesthesiology* 2010;112:631-6.
- 4: Giezen TJ, Mantel-Teeuwisse AK, Straus SM, Schellekens H, Leufkens HG, Egberts AC. Safety-related regulatory actions for biologicals approved in the United States and the European Union. *JAMA* 2008;300:1887-96.
- 5: Leendertse AJ, Egberts AC, Stoker LJ, van den Bemt PM; HARM Study Group. Frequency of and risk factors for preventable medication-related hospital admissions in the Netherlands. *Arch Intern Med* 2008;168:1890-6.

Gert Folkerts

Pharmacology, Faculty of Science, Department of Pharmaceutical Sciences

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Education and Experience

- | | |
|--------------|---|
| 2003-present | Full Professor, Pharmacology, Faculty of Science, Department of Pharmaceutical Sciences. |
| 1989-2003 | PhD-student, Assistant Professor, Associate Professor, Department of Pharmacology, Faculty Pharmacy, Utrecht University, The Netherlands. Guest researcher at the University of Edmonton (Canada), the Wellcome Research Institute in Beckenham (UK) and Janssen Research Foundation in Beerse (Belgium). |
| 1983-1989 | Technician and PhD-student, Department of Pharmacology, Pharmacy & Toxicology, Faculty of Veterinary Sciences. Utrecht University, The Netherlands |
| 1981-1983 | Technician Rudolf Magnus Institute for Pharmacology at the Utrecht University, The Netherlands |

Other functions: From 2007 Editor of the European Journal of Pharmacology, Utrecht, The Netherlands.

Research Keywords: Immuno-Pharmacology, Chronic Inflammatory Diseases, Translational Medicine, Functional Foods, From Molecular to In Vivo Pharmacology.

Theme: Immunology and Neuroscience

Offering: In Vitro and in Vivo test models for (chronic) inflammatory diseases. Respiratory, Gastro-Intestinal and Cardio-Vascular research.

Looking for: Collaborations to narrow the gap between fundamental research and valorization = Translational Medicine = Proof of Concept

Selected Recent Publications:

1. Hahn CS, Scott DW, Xu X, Roda MA, Payne GA, Wells JM, Viera L, Winstead CJ, Bratcher P, Sparidans RW, Redegeld FA, Jackson PL, Folkerts G, Blalock JE, Patel RP, Gaggari A. The matrikine N- α -PGP couples extracellular matrix fragmentation to endothelial permeability. *Sci Adv.* 2015; 1(3). pii: e1500175
2. Abdul Roda M, Fernstrand AM, Redegeld FA, Blalock JE, Gaggari A, Folkerts G. The matrikine PGP as a potential biomarker in COPD. *Am J Physiol Lung Cell Mol Physiol.* 2015; 308(11): L1095-101. doi: 10.1152/ajplung.00040.2015.
3. Verheijden KA, Willemsen LE, Braber S, Leusink-Muis T, Jeurink PV, Garssen J, Kraneveld AD, Folkerts G. The development of allergic inflammation in a murine house dust mite asthma model is suppressed by synbiotic mixtures of non-digestible oligosaccharides and *Bifidobacterium breve* M-16V. *Eur J Nutr.* 2015 May 24. PubMed PMID: 26003185.
4. Groenink L, Folkerts G, Schuurman HJ. European Journal of Pharmacology, Special issue on translational value of animal models: Introduction. *Eur J Pharmacol.* 2015;15;759:1-2. doi: 10.1016/j.ejphar.2015.03.050.
5. Sorbello V, Ciprandi G, Di Stefano A, Massaglia GM, Favatà G, Conticello S, Malerba M, Folkerts G, Profita M, Rolla G, Ricciardolo FL. Nasal IL-17F is related to bronchial IL-17F/neutrophilia and exacerbations in stable atopic severe asthma. *Allergy.* 2015; 70(2):236-40. doi: 10.1111/all.12547.
6. Zheng B, van Bergenhenegouwen J, van de Kant HJ, Folkerts G, Garssen J, Vos AP, Morgan ME, Kraneveld AD. Specific probiotic dietary supplementation leads to different effects during remission and relapse in murine chronic colitis. *Benef Microbes.* 2015;1-10. [Epub ahead of print] PubMed PMID: 26645352.

Johan Garssen

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Education and Experience

2005-present	Professor Immunopharmacology, Faculty of Science, Utrecht University + Director Immunology department Danone/Nutricia-research for Specialized Nutrition (Wageningen/Utrecht/Singapore)
2002-2005	Head immunology section Numico-research, The Netherlands
1994-2002	Senior immunologist/project leader RIVM, The Netherlands
1991-1994	Post-doc immunology, pharmacology
1987-1991	Ph.D. Immunopharmacology, Faculty of Pharmacy, Utrecht
1981-1987	Study medicine and study biology VU, Amsterdam, cum laude

Other functions: Board member different advisory boards on immunology and pharmacology, medical ethical committees, ILSI task forces on immunology, DEC consult

Research Keywords: allergy, inflammation, neuro-immune interactions, immune-regulation, vaccination, translational medicine, immunopharmacology

Theme: immunology, allergy, vaccination, neuro-immunology, infection, inflammation

Offering: translational medicine (from molecule towards proof of concept clinical trials)

Looking for: new concepts/targets for prevention and/or treatment of immune related disorders

Selected Recent Publications:

1. van Vlies N, Hogenkamp A, Fear AL, van Esch BC, Oosting A, van de Heijning B, van der Beek E, Calder PC, Garssen J. Perinatal programming of murine immune responses by polyunsaturated fatty acids. *Journal of Developmental Origins and Disease*, 2011, 2(2), 112-123
2. B.C.A.M. van Esch, B. Schouten, G.A. Hofman, T. van Baalen, F.P. Nijkamp, L.M.J. Knippels, L.E.M. Willemsen, J. Garssen. Acute allergic skin response as a new tool to evaluate the allergenicity of whey hydrolysates in a mouse model of orally induced cow's milk allergy. *Pediatr Allergy Immunol* 2011; 21: 780-786
3. S. de Kivit S, E. van Hoffen, N. Korthagen, J. Garssen, L.E. Willemsen. Apical TLR ligation of intestinal epithelial cells drives a T(h)1-polarized regulatory or inflammatory type effector response in vitro. *Immunobiology* 2011; 6(4):518-27
4. Eussen SR, Rompelberg CJ, Andersson KE, Klungel OH, Hellstrand P, Oste R, van Kranen H, Garssen J. Simultaneous intake of oat bran and atorvastatin reduces their efficacy to lower lipid levels and atherosclerosis in LDLr-/- mice. *Pharmacol Res.* 2011; 64(1): 36-43
5. Schouten B, van Esch BC, Hofman GA, de Kivit S, Boon L, Knippels LM, Garssen J, Willemsen LE. A potential role for CD25+ regulatory T-cells in the protection against casein allergy by dietary non-digestible carbohydrates. *Br J Nutr.* 2011 Jun 23:1-10
6. B. van't Land, M. Schijf, B.C.A.M. van Esch, J. van Bergenhenegouwen, J. Bastiaan, B. Schouten, L. Boon, J. Garssen. Regulatory T-cells have a prominent role in the immune modulated vaccine response by specific oligosaccharides. *Vaccine* 28 (2010) 5711-5717.
7. B. Schouten, B. van Esch, A.O.J. van Thuijl, B. Blokhuis, T. Groot Kormelink, G. Hofman, G. Moro, G. Boehm, S. Arslanoglu, A. Sprikkelman, L.Willemsen, L. Knippels, F. Redegeld, J.Garssen. Contribution of IgE and Immunoglobulin free light chain in the allergic reaction to cow's milk proteins. *J Allergy Clin Immunol.* 2010 Jun;125(6):1308-14

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Education and Experience

2011-present	Assistant professor, Division of Cell Biology, Dept. of Biology (Utrecht University)
2009-2011	Post-doc Neurology / Neuroscience (Erasmus MC, Rotterdam)
2001-2009	Senior scientist, Clinical genetics (Erasmus MC, Rotterdam)
1997-2000	Post-doc, Developmental Neurobiology (NIMR, London, UK)
1992-1996	PhD, Clinical Genetics, Erasmus MC, Rotterdam

Other functions: Member of exam committee Biology and Biomedical Sciences

Research Keywords: auto-immunity, limbic encephalitis, neurodevelopment, AIS

Theme: auto-immunity, molecular neurobiology

Offering: developmental biology, molecular cloning, medical genetics

Looking for: screening sera, neuronal development markers

Selected Recent Publications:

1. van Beuningen, SFB, Will, L, Harterink, M, Chazeau, A, van Battum, EY, Frias, CP, Franker, MAM, Katruhka, E, Stucchi, R, Vocking, K, Antunes, AT, Slenders, L, Doulkeridou, S, Sillevs Smitt, P, Altelaar, AFM, Post, JA, Akhmanova, A, Pasterkamp, RJ, Kapitein, L, de Graaff, E and Hoogenraad, CC. (2015) *TRIM46 controls neuronal polarity and axon specification by driving the formation of parallel microtubule arrays*. Neuron doi:10.1016/j.neuron.2015.11.012.
2. van Coevorden-Hameete MH, de Graaff E, Titulaer MJ, Hulsenboom E, Sabater L, Hoogenraad CC, Sillevs Smitt PA. (2015) *Plasticity-related gene 5: A novel surface autoantigen in paraneoplastic cerebellar degeneration*. Neurol Neuroimmunol Neuroinflamm. 2:e156
3. Jaarsma D, van den Berg R, Wulf PS, van Erp S, Keijzer N, Schlager MA, de Graaff E, De Zeeuw CI, Pasterkamp RJ, Akhmanova A, Hoogenraad CC. (2014) *A role for Bicaudal-D2 in radial cerebellar granule cell migration*. Nat Commun. 5:3411.
4. van Coevorden-Hameete MH, de Graaff E, Titulaer MJ, Hoogenraad CC, Sillevs Smitt PA. (2014) *Molecular and cellular mechanisms underlying anti-neuronal antibody mediated disorders of the central nervous system*. Autoimmun Rev. 13:299-312.
5. de Graaff E, Maat P, Hulsenboom E, van den Berg R, van den Bent M, Demmers J, Lugtenburg PJ, Hoogenraad CC, Sillevs Smitt P. (2012) *Identification of delta/notch-like epidermal growth factor-related receptor as the Tr antigen in paraneoplastic cerebellar degeneration*. Ann Neurol. 71:815-24.

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www.uu.nl/staff/LGroenink



Education and Experience

2007-present	Associate professor in Psychopharmacology, Faculty of Science, Utrecht University
2001- 2007	Assistant professor in Psychopharmacology, Faculty of Pharmacy, Utrecht University
1997- 2001	Postdoc, department of Psychopharmacology, Utrecht University
1992-1996	PhD Psychoneuroendocrinology, Faculty of Pharmacy, Utrecht University (supervisors Prof. R.A. Maes and Prof. B. Olivier)

Other functions: SYRCLE Ambassador (Systematic review Centre for animal experimentation), Fellow member European College of Neuropsychopharmacology, Editor European Journal of Pharmacology

Research Keywords: In vivo pharmacology, Neurodevelopment, Personalized medicine, Systematic review & meta-analysis

Theme: Neuroscience, Drug Innovation, Dynamics of Youth

Offering: *in vivo* pharmacology with regard to brain disorders, Preclinical data synthesis

Looking for: Collaboration to combine ongoing research with ex vivo techniques (e.g. iPSCs, micro organoids)

Selected Recent Publications:

1. Bijlsma EY, Hendriksen H, Baas JM, Millan MJ, **Groenink L** (2015) Lifelong disturbance of serotonin transporter functioning results in fear learning deficits: Reversal by blockade of CRF₁ receptors. *Eur Neuropsychopharmacology* 25(10):1733-43.
2. **Groenink L**, Verdouw PM, Bakker B, Wever KE (2015) Pharmacological and methodological aspects of the separation-induced vocalization test in guinea pig pups; a systematic review and meta-analysis. *Eur J Pharmacol* 753:191-208.
3. Douma TN, Millan MJ, Boulay D, Griebel G, Verdouw PM, Westphal KG, Olivier B, **Groenink L** (2014). CRF1 receptor antagonists do not reverse pharmacological disruption of prepulse inhibition in rodents. *Psychopharmacology (Berl)* 231(7):1289-303.
4. Vinkers CH, Hendriksen H, van Oorschot R, Cook JM, Rallipalli S, Huang S, Millan MJ, Olivier B, **Groenink L** (2012) Lifelong CRF overproduction is associated with altered gene expression and sensitivity of discrete GABA(A) and mGlu receptor subtypes. *Psychopharmacology (Berl)* 219(3):897-908.
5. **Groenink L**, Bijlsma EY, van Bogaert MJ, Oosting RS, Olivier B (2011) Serotonin_{1A} receptor deletion does not interact with maternal separation-induced increases in startle reactivity and prepulse inhibition deficits. *Psychopharmacology (Berl)* 214(1): 353-365.
6. Vinkers CH, Oosting RS, van Bogaert MJ, Olivier B, **Groenink L** (2010) Early-life blockade of 5-HT_{1A} receptors alters adult anxiety behavior and benzodiazepine sensitivity. *Biol Psychiatry* 67: 309-16

Henk P. Haagsman

Division of Molecular Host Defence, Department of Infectious Diseases and Immunology, Faculty of Veterinary Medicine

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Education and Experience

2006-present	Full Professor (UU: Molecular Host Defence)
1998-2006	Full Professor (UU: Meat Science)
1988- 1998	Assistant/Associate Professor (UU: pulmonary biochemistry)
1986-1988	Visiting Scientist at University of California (San Francisco)
1983-1986	Postdoc (UU: pulmonary toxicology)
1978-1983	PhD (UU: hepatic lipid metabolism; Prof. van Golde)

Other functions: Chairman Department of Infectious Diseases and Immunology; Coordinator One Health: Infection & Immunity Program, Faculty of Veterinary Medicine

Research Keywords: innate immunity, mucosal immunity, host defense peptides (antimicrobial peptides), C-type lectins, alternatives to antibiotics, antivirals, immunomodulation, vaccines

Theme: immunology, infection

Offering: antibacterial and antifungal assays, infection models, isothermal titration calorimetry

Looking for: drug design (biologicals), structural biology, microbiome analysis

Selected Recent Publications:

1. Coorens M, van Dijk A, Bikker F, Veldhuizen EJA, Haagsman HP. Importance of endosomal cathelicidin degradation to enhance DNA-induced chicken macrophage activation (2015) *The Journal of Immunology*, 195:3970-3977
2. Ordonez SR, Amarullah IH, Wubbolts RW, Veldhuizen EJA, Haagsman HP. Fungicidal mechanisms of cathelicidins LL-37 and CATH-2 revealed by live-cell imaging (2014) *Antimicrobial Agents and Chemotherapy* 58, 2240-2248
3. Pezzulo AA, Tang XX, Hoegger MJ, Alaiwa MH, Ramachandran S, Moninger TO, Karp PH, Wohlford-Lenane CL, Haagsman HP, van Eijk M, Bánfi B, Horswill AR, Stoltz DA, McCray PB Jr, Welsh MJ, Zabner J. Reduced airway surface pH impairs bacterial killing in the porcine cystic fibrosis lung (2012) *Nature*, 487, 109-113
4. van Dijk A, Molhoek EM, Bikker FJ, Yu PL, Veldhuizen EJA, Haagsman HP. Avian cathelicidins: Paradigms for the development of anti-infectives (2011) *Veterinary Microbiology* 153, 27-36
5. Van Eijk M, Bruinsma L, Hartshorn, KL, White MR, Rynkiewicz MJ, Seaton BA, Hemrika W, Romijn RA, Van Balkom BW, Haagsman, HP. Introduction of N-linked glycans in the lectin domain of surfactant protein D: Impact on interactions with influenza A viruses (2011) *Journal of Biological Chemistry* 286, 20137-20151

Hans de Haard

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Education and Experience

- | | |
|--------------|--|
| 2009-present | Professor in camelid immunology |
| 2008-present | Chief Scientific Officer arGEN-X |
| 2002-2008 | Sr Director Discovery Research Ablynx |
| 1998-2002 | Postdoc / Scientist at Unilever Research |
| 1991-1996 | PhD, Maastricht University (supervisors Prof. Arends and Dr. Hoogenboom) |

Other functions: Member of the The Antibody Society

Research Keywords: Therapeutic Antibodies, Oncology, Autoimmunity, Inflammation, Immunology

Theme: immunology, cancer

Offering: antibody generation by phage display, optimization for effector function & serum half life, characterization therapeutic antibodies in in vitro and in vivo models

Looking for: experts in novel targets in oncology and inflammation / autoimmunity

Selected Recent Publications:

1. Emmerson CD, van der Vlist EJ, Braam MR, Vanlandschoot P, Merchiers P, de Haard HJ, Verrips CT, van Bergen en Henegouwen PM, Dolk E. (2011) Enhancement of polymeric immunoglobulin receptor transcytosis by biparatopic VHH. *PLoS One*. **6**(10):e26299.
2. Jähnichen S, Blanchetot C, Maussang D, Gonzalez-Pajuelo M, Chow KY, Bosch L, De Vrieze S, Serruys B, Ulrichs H, Vandevelde W, Saunders M, De Haard HJ, Schols D, Leurs R, Vanlandschoot P, Verrips T, Smit MJ. (2010) CXCR4 nanobodies (VHH-based single variable domains) potently inhibit chemotaxis and HIV-1 replication and mobilize stem cells. *Proc Natl Acad Sci U S A*. **107**(47):20565-70.
3. Vandenbroucke K, de Haard H, Beirnaert E, Dreier T, Lauwereys M, Huyck L, Van Huysse J, Demetter P, Steidler L, Remaut E, Cuvelier C, Rottiers P. (2010) Orally administered *L. lactis* secreting an anti-TNF Nanobody demonstrate efficacy in chronic colitis. *Mucosal Immunol*. **3**(1):49-56.
4. Roovers RC, Laeremans T, Huang L, De Taeye S, Verkleij AJ, Revets H, de Haard HJ, van Bergen en Henegouwen PM. (2007) Efficient inhibition of EGFR signaling and of tumour growth by antagonistic anti-EFGR Nanobodies. *Cancer Immunol Immunother*. **56**(3):303-317.

Albert J.R. Heck

Biomolecular Mass Spectrometry and Proteomics, Faculty of Science,
Departments of Chemistry and Pharmaceutical Sciences
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Education and Experience

1998-present	Full professor in Biomolecular Mass Spectrometry and Proteomics
2003-present	Scientific director Netherlands Proteomics Centre
1996- 1998	Senior Fellow/Lecturer in Physical Chemistry & Mass Spectrometry, Chemistry Department, University of Warwick (UK).
1993-1996	Postdoc in Physical Chemistry, Stanford University and Sandia National Laboratory, USA in the groups of Richard Zare and David Chandler
1989-1993	PhD in Chemistry, University of Amsterdam (supervisor Nico M.M. Nibbering)

Other functions: Associate Editor of Protein Science, member of the KNAW, Embo, Council of the Human Proteome Organization, member "programmaraad Chemistry of Life van het TKI Chemie". Scientific Director Bijvoet Center (2006-2011), Scientific Director Utrecht Institute for Pharmaceutical Research (2015-present).

Research Keywords: mass spectrometry, systems medicine, peptides, proteins, signaling, structure function relationships

Theme: Science_for_life, immunology, stem cell development, cancer

Offering: mass spectrometry, proteomics, structural biology

Looking for: interesting biology, proteins assemblies and new technologies

Selected Recent Publications:

1. de Lau, W. et al. Lgr5 homologues associate with Wnt receptors and mediate R-spondin signalling. *Nature* 476 (2011) 293-297.
2. Munoz, J. et al. The Lgr5 intestinal stem cell signature: robust expression of proposed quiescent '+4' cell markers. *EMBO J* 31 (2012) 3079-3091.
3. Hussein, S.M.I. et al. Genome-wide characterization of the routes to pluripotency. *Nature* 516, (2014) 198-206.
4. Benevento, M. et al. Proteome adaptation in cell reprogramming proceeds via distinct transcriptional networks. *Nature Commun.* 5 (2014) 5613 DOI: 10.1038/ncomms6613
5. Liu, F. et al. Proteome-wide profiling of protein assemblies by cross-linking mass spectrometry. *Nature Methods* 12 (2015) 1179-84

J. Bernd Helms

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Education and Experience

2002-present	Full professor in veterinary Biochemistry Dept. Biochemistry and Cell Biology Utrecht University
1997- 2002	Junior group leader, Biochemie-Zentrum Heidelberg, Germany
1994-1996	Postdoc in the group of Prof. F.T. Wieland University of Heidelberg, Germany
1991-1994	Postdoc in the group of Prof. J.E. Rothman, Sloan-Kettering Institute, New York, USA
1986-1991	PhD Center for Biomembranes and Lipid Enzymology, Department of Biochemistry (Prof. dr. K.W.A. Wirtz)

Other functions: Chairman Department of Biochemistry and Cell Biology, Director of the Institute of Biomembranes, Member Editorial Board of Progress in Lipid Research

Research Keywords: Lipids, Lipidomics, Lipid Droplets, Autophagy, Liver fibrosis and regeneration, Amyloids, CAP superfamily of proteins.

Theme: Life Sciences, Regenerative Medicine, Bioinformatics

Offering: Lipidomics, primary cell cultures, protein and lipid biochemistry

Looking for: Methods for identification of potential drug targets.

Selected Recent Publications:

1. Helms, J.B., Kaloyanova, D.V., Strating, J.R., van Hellemond, J.J., van der Schaar, H.M., Tielens, A.G., van Kuppeveld, F.J., Brouwers, J.F. Targeting of the hydrophobic metabolome by pathogens (2015) *Traffic* 16, 439-60
2. Orlachs, N.K., Mahalka, A.K., Kaloyanova, D., Kinnunen, P.K., and Helms, J.B. GPR-1 forms amyloid-like fibers by interaction with acidic phospholipids and inhibits A β aggregation (2014) *Amyloid* 21, 88-96
3. Shoji-Kawata, S., Sumpter, R., Leveno, M., Campell, G.R., Zou, Z., Kinch, L., Wilkins, A.D., Sun, Q., Pallauf, K., MacDuff, D., Huerta, C., Virgin, H.W., Helms, J.B., Eerland, R., Tooze, S.A., Xavier, R., Lenschow, D.J., Yamamoto, A., King, D., Lichtarge, O., Grishin, N.V., Spector, S.A., Kaloyanova, D.V., and Beth Levine. Identification of a candidate therapeutic autophagy-inducing peptide (2013) *Nature* 494, 201-206
4. Testerink, M., Ajat, M.A., Houweling, M., Brouwers, J.F., Pully, V.V., van Manen, H-J., Otto, C., Helms, J.B., and Vaandrager, A.B. Replacement of retinyl esters by polyunsaturated triacylglycerol species in lipid droplets of hepatic stellate cells during activation (2012) *PLoS ONE* 7, e34945
5. Van der Meer-Janssen, Y.P.M., van Galen, J., Batenburg, J.J., and Helms, J.B. Lipids in host-pathogen interactions: pathogens exploit the complexity of the host cell lipidome (2010) *Prog. Lipid Res.* 49, 1-26
6. Testerink, N., Van der Sanden, M.H.M., Houweling, M., Helms, J.B., and Vaandrager, A.B., Depletion of phosphatidylcholine affects endoplasmic reticulum morphology and protein traffic at the Golgi complex. (2009) *J. Lipid Res.* 50, 2182-2206

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Education and Experience

2012- present	scientific director of 'Utrecht Institute for Pharmaceutical Sciences'
2009-2011	vice dean of the Faculty of Science, Utrecht University
1997-present	Head of the Department of Pharmaceutics
1992-1997	professor of Pharmaceutical Polymers, Utrecht Institute for Pharmaceutical Sciences, Utrecht University, The Netherlands)

Other functions: Editor Journal of Controlled Release

Research Keywords: biodegradable polymers, drug delivery, drug targeting, biomaterials

Theme: drug innovation

Offering: expertise of polymers for biomedical and pharmaceutical applications ; drug formulation and delivery

Looking for: biological active compounds, drugs, drug candidates, animal models

Selected Recent Publications:

1. Crielaard BJ, Rijcken CJF, Quan L, van der Wal S, Altintas I, van der Pot M, Kruijtzter JAW, Liskamp RMJ, Schiffelers RM, van Nostrum CF, Hennink WE, Wang D, Lammers T, and Storm G. Glucocorticoid-loaded core-crosslinked polymeric micelles with tailorable release kinetics for targeted therapy of rheumatoid arthritis. *Angewandte Chemie* 51, 7254-7258, 2012
2. Shi Y, van Steenberghe MJ, Teunissen EA, Novo L, Gradmann S, Baldus M, van Nostrum CF, and Hennink WE. π - π Stacking increases the stability and loading capacity of thermosensitive polymeric micelles for chemotherapeutic drugs. *Biomacromolecules* 14, 1732-1740. 2013.
3. Samadi N, van Nostrum CF, Vermonden T, Amidi M, and Hennink WE. Mechanistic studies on the degradation and protein release characteristics of poly(lactic-co-glycolic-co-hydroxymethylglycolic acid) nanospheres. *Biomacromolecules* 14, 1044-1053, 2013.
4. Talelli M, Montari K, Rijcken CJF, Aben RWM, Lammers T, Scheeren HW, van Nostrum CF, Storm G, and Hennink WE. Synthesis and characterization of biodegradable and thermosensitive polymeric micelles with covalently bound doxorubicin-glucuronide prodrug via click chemistry. *Bioconjugate Chemistry* 22, 2519-2530, 2011
5. Seyednejad H, Ghassemi AH, van Nostrum CF, Vermonden T, and Hennink WE. Functional aliphatic polyesters for biomedical and pharmaceutical applications. *Journal of Controlled Release* 152, 168-176, 2011

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Education and Experience

2008-present	Professor of Molecular Developmental Zoology, Leiden University
1994-present	Group leader, Hubrecht Institute, Utrecht
1992-1994	post-doctoral fellow with Tony Hunter, The Salk Institute, La Jolla, CA, USA
1988-1992	PhD, Developmental Biology, Utrecht University MSc Biochemistry, Utrecht University
1983-1988	

Other functions: Deputy Director Research, Hubrecht Institute, Utrecht

Research Keywords: protein-tyrosine phosphatase, zebrafish, signaling, gastrulation, bioactive compounds from fungi

Theme: infection, development, cancer

Offering: molecular developmental biology, diverse library of fungal secondary metabolites

Looking for: specific bio-assays to screen the library above

Selected Recent Publications:

1. Choorapoikayil S, Kers R, Herbomel P, Kissa K and den Hertog J (**2014**) Pivotal role of Pten in the balance between proliferation and differentiation of hematopoietic stem cells in zebrafish. *Blood* 123, 184-190
2. Bonetti M, Paardekooper Overman J, Tessadori F, Noël E, Bakkers J and den Hertog J (**2014**) Noonan and LEOPARD syndrome Shp2 variants induce heart displacement defects in zebrafish. *Development* 141, 1961-19703.
3. Paardekooper Overman J, Yi JS, Bonetti M, Soulsby M, Preisinger C, Stokes MP, Hui L, Silva JC, Overvoorde J, Giansanti P, Heck AJR, Kontaridis MI, den Hertog J and Bennett AM (**2014**) PZR coordinates Noonan and LEOPARD syndrome signaling in zebrafish and mice. *Mol Cell Biol* 34, 2874-2889
4. Vacaru AM, den Hertog J. (**2010**) Serine dephosphorylation of RPTP{alpha} in mitosis induced Src binding and activation. *Mol Cell Biol.* 30, 2850-2861
5. Faucherre, A., Taylor, G.S., Overvoorde, J., Dixon, J.E. and den Hertog, J. (**2008**) Zebrafish pten genes have overlapping and non-redundant functions in tumorigenesis and embryonic development. *Oncogene* 27, 1079-1086

Sander J.L. van den Heuvel

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Education and Experience

2005-present	Professor, Department of Developmental Biology, Utrecht University
1996-2005	Assistant Professor of Medicine, Harvard Medical School, Boston, USA. Assistant Geneticist and Member, MGH Cancer Center.
1994-2005	Instructor in Medicine, Harvard Medical School, Boston MA. Visiting scientist (Post-doc) in the Laboratory of Dr. Robert Horvitz, Biology Department, Massachusetts Institute of Technology (MIT)
1991-1994	Research Fellow in Medicine (Post-doc), Molecular Oncology, Laboratory of Dr. Ed Harlow, MGH Cancer Center, Harvard Medical School, Boston, MA
1985-1991	Ph.D. Experimental Oncology, Leiden University, (with Prof. Dr. A. van der Eb)

Other functions:

Chair Board of Studies, Utrecht University Graduate School of Life Sciences

Research Keywords:

Development, *C. elegans*, cell cycle, stem cells, asymmetric cell division, proliferation-differentiation, genetics

Theme: Development, Cancer, Regeneration

Offering: High-throughput functional screens, biological targets

Looking for: Structural analysis

Selected Recent Publications:

1. Galli M, Muñoz J, Portegijs V, Boxem M, Grill SW, Heck AJ, van den Heuvel S. (2011) aPKC phosphorylates NuMA-related LIN-5 to position the mitotic spindle during asymmetric division. *Nature Cell Biology* 13(9):1132-1138
2. Korzelius J, The SI, Ruijtenberg S, Prinsen M, Portegijs V, Middelkoop T, Groot Koerkamp MJ, Holstege FCP, Boxem M, and van den Heuvel S. (2011). *C. elegans* Cyclin D/Cdk4 and Cyclin E/Cdk2 Induce Distinct Cell Cycle Re-entry Programs in Differentiated Muscle Cells. *PLoS Genetics*.
3. Wildwater M, Sander N, de Vreede G, van den Heuvel S. (2011). Cell shape and Wnt signaling redundantly control the division axis of *C. elegans* epithelial stem cells. *Development*. 2011 138(20):4375-85.
4. Van der Voet M, Berends CW, Perreault A, Nguyen-Ngoc T, Gönczy P, Vidal M, Boxem M, van den Heuvel S. (2009) NuMA-related LIN-5, ASPM-1, calmodulin and dynein promote meiotic spindle rotation independently of cortical LIN-5/GPR/Ga. *Nature Cell Biology*:269-277.
5. van den Heuvel S, Dyson NJ. Conserved functions of the pRB and E2F families. (2008) *Nature Reviews Mol. Cell Biol.* 9:713-24.

Marcel A.G. van der Heyden

Department of Medical Physiology, UMCU, Division Heart & Lungs

m.a.g.vanderheyden@umcutrecht.nl



Education and Experience

2007-present	Assistant Professor, Department of Medical Physiology, UMCU
2000-2007	Postdoctoral Fellow (with Prof H. Jongsma and Prof. M.A. Vos), Department of Medical Physiology, UMCU
1996-2000	Postdoctoral Fellow (with Dr. Destrée and Dr. Defize), Hubrecht laboratory
1990-1996	Ph.D. Molecular Cellular Biology (with Prof. A.J. Verkleij), Utrecht University
1985-1990	M.Sc. Biology, Utrecht University

Other functions: General Secretary Dutch Society of Physiology

Research Keywords: cardiac ion channels, cardiac arrhythmias

Theme: cardiovascular

Offering: ion channel trafficking assays, electrophysiology, arrhythmia models

Looking for: medicinal chemistry, structural biology

Selected Recent Publications:

1. Van der Heyden MAG. (2012) Finding inward rectifier channel inhibitors: why and how? *Front Pharmacol* 2:95
2. Ferrer T, Ponce-Balbuena D, López-Izquierdo A, Aréchiga-Figueroa IA, De Boer TP, Van der Heyden MAG, Sánchez-Chapula JA. (2011) Carvedilol inhibits Kir2.3 channels by interference with PIP2-channel interaction. *Eur J Pharmacol* 668:72-77
3. López-Izquierdo A, Aréchiga-Figueroa IA, Moreno-Galindo EG, Ponce-Balbuena D, Rodríguez-Martínez M, Ferrer-Villada T, Rodríguez-Menchaca AA, Van der Heyden MAG, Sánchez-Chapula JA. (2011) Mechanisms for Kir channel inhibition by quinacrine: acute pore block of Kir2.x channels and interference in PIP2 interaction with Kir2.x and Kir6.2 channels. *Pflugers Arch* 462:505-517
4. Van der Heyden MAG, Sánchez-Chapula JA. (2011) Towards specific cardiac IK1 modulators for in vivo application; old drugs point the way. *Heart Rhythm* 8:1076-1080
5. De Boer TP, Nalos L, Stary A, Kok B, Houtman MJC, Antoons G, Van Veen TAB, Beekman JDM, De Groot BL, Opthof T, Rook MB, Vos MA, Van der Heyden MAG. (2010) The antiprotozoal drug pentamidine blocks KIR2.x-mediated inward rectifier current by entering the cytoplasmic pore region of the channel. *Br J Pharmacol* 159:1532-1541

Casper Hoogenraad

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Education and Experience

2011-present	Full Professor, Department of Biology, Faculty of Science, Utrecht University
2005-2010	Associate Professor, Department of Neuroscience, Erasmus Medical Center
2002-2005	Post-doctoral research associate in the group of Prof. Morgan Sheng, Massachusetts Institute of Technology (MIT), Cambridge, USA
1996-2001	Ph.D. Molecular Biology, Erasmus University Rotterdam (with Dr. N. Galjart, Prof. F. Grosveld and Prof. C.I.de Zeeuw)

Other functions: Recipient of ESF-EURYI (2005), ZonMW-VIDI (2005), NWO-ALW VICI (2011) and ERC Consolidator (2013) grants. Member of EMBO, the FENS-Kavli network of excellence and 'De Jonge Akademie (DJA)' which is part of the Royal Academy of Arts and Sciences (KNAW)

Research Keywords: Neurobiology, neuronal development, neuronal polarity, axon outgrowth, dendritogenesis, synapse formation, synaptic plasticity, cytoskeleton, transport, motor proteins, live-cell imaging

Theme: neuroscience, stem cell development

Offering: Molecular, and cellular biology methods in *in vitro* (neuron cultures), *ex vivo* (brain slices), and *in vivo* (mice) systems. High-resolution live cell imaging microscopy (two photon microscopy, spinning disc microscopy and total internal reflection fluorescence microscopy, TIRF) and quantitative analysis using advanced super-resolution microscopy (photo-activated localization microscopy, PALM).

Looking for: Structure-function analysis and candidates for target screen (cellular function/selection)

Selected Recent Publications:

1. van Beuningen SFB, Will L, Harterink M, Chazeau A, van Battum EY, Frias CP, Franker MAM, Katrukha EA, Stucchi R, Vocking K, Antunes AT, Slenders L, Doulkeridou S, Sillevius Smitt P, Altelaar AFM, Post JA, Akhmanova A, Pasterkamp RJ, Kapitein LC, de Graaff E and Hoogenraad CC (2015). *TRIM46 controls neuronal polarity and axon specification by driving the formation of parallel microtubule arrays*. Neuron In press
2. van Bergeijk P, Adrian M, Hoogenraad CC, Kapitein LC (2015). *Optogenetic control of organelle transport and positioning*. Nature. 518(7537):111-4
3. Yau KW, van Beuningen SF, Cunha-Ferreira I, Cloin BM, van Battum EY, Will L, Schätzle P, Tas RP, van Krugten J, Katrukha EA, Jiang K, Wulf PS, Mikhaylova M, Harterink M, Pasterkamp RJ, Akhmanova A, Kapitein LC, Hoogenraad CC (2014). *Microtubule minus-end binding protein CAMSAP2 controls axon specification and dendrite development*. Neuron 82(5):1058-73.
4. van Spronsen M, Mikhaylova M, Lipka J, Schlager MA, van den Heuvel DJ, Kuijpers M, Wulf PS, Keijzer N, Demmers J, Kapitein LC, Jaarsma D, Gerritsen HC, Akhmanova A and Hoogenraad CC (2013) *TRAK/Milton Motor-Adaptor Proteins Steer Mitochondrial Trafficking to Axons and Dendrites*, Neuron. 77(3):485-502
5. Hellal F, Hurtado A, Ruschel J, Flynn KC, Laskowski CJ, Umlauf M, Kapitein LC, Strikis D, Lemmon V, Bixby J, Hoogenraad CC, Bradke F (2011). *Microtubule stabilization reduces scarring and causes axon regeneration after spinal cord injury*. Science 331(6019):928-31

Johan Kemmink

Medicinal Chemistry and Chemical Biology, Faculty of Science, Department of Pharmaceutical Sciences

j.kemmink@uu.nl



Education and Experience

2000-present:	Assistant Professor Medicinal Chemistry & Chemical Biology Utrecht University
1998-2000	Professor of Biochemistry Department of Biochemistry University of Oulu (Finland)
1991-1997	Staff Scientist (with Prof. Thomas E. Creighton) Structures Program EMBL Heidelberg (Germany)
1982-1986	Ph.D. Physical Chemistry (with Prof. Robert Kaptein) Department of Chemistry University of Groningen

Other functions: NMR facility manager

Research Keywords: Inflammation, C5a receptor, NMR, Biophysics, Structural Biology

Theme: immunology

Offering: Molecular structure determination & modeling

Looking for: biological targets in our themes

Selected Recent Publications:

1. Bunschoten, A., Ippel, J., Kruijtzter, J., Feitsma, L., de Haas, C., Liskamp, R., and **Kemmink, J.** (2011). A peptidic mimic of the chemotaxis inhibitory protein of *Staphylococcus aureus*: Towards the development of novel anti-inflammatory compounds. *Amino Acids* **40**, 731-740.
2. Bunschoten, A., Feitsma, L.J., Kruijtzter, J.A.W., de Haas, C.J.C., Liskamp, R.M.J., and **Kemmink, J.** (2010). CHIPS binds to the phosphorylated N-terminus of the C5a-receptor. *Bioorg Med Chem Lett* **20**, 3338-3340.
3. Ippel, J.H., de Haas, C.J.C., Bunschoten, A., van Strijp, J.A.G., Kruijtzter, J.A.W., Liskamp, R.M.J., and **Kemmink, J.** (2009). Structure of the tyrosine-sulfated C5a receptor N-terminus in complex with chemotaxis inhibitory protein of *Staphylococcus aureus*. *J Biol Chem* **284**, 12363-12372.
4. Bunschoten, A., Kruijtzter, J.A.W., Ippel, J.H., de Haas, C.J.C., van Strijp, J.A.G., **Kemmink, J.**, and Liskamp, R.M.J. (2009). A general sequence independent solid phase method for the specific synthesis of multiple sulfated-tyrosine containing peptides. *Chem Commun*, 2999-3001.
5. Haas, P.J., de Haas, C.J.C., Poppelier, M.J.J.C., van Kessel, K.P.M., van Strijp, J.A.G., Dijkstra, K., Scheek, R.M., Fan, H., Kruijtzter, J.A.W., Liskamp, R.M.J., and **Kemmink, J.** (2005). The structure of the C5a receptor-blocking domain of chemotaxis inhibitory protein of *Staphylococcus aureus* is related to a group of immune evasive molecules. *J Mol Biol* **353**, 859-872.

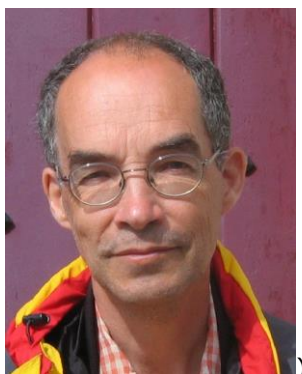
Gideon F.A. Kersten

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Drug Delivery Technology, LACDR, Leiden

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Education and Experience

2003-present	Head Analytics and Formulation, Intravacc (NVI until 2013), Bilthoven
1991-2002	Head Biochemistry Dep. at Lab. Product and Process Dev., RIVM, Bilthoven.
1986-1990	PhD Pharmaceutical Sciences, Utrecht University (supervisors Prof. Crommelin, Dr. Beuvery)

Other functions: Professor (0.2 FTE) in vaccine delivery, LACDR, Leiden

Research Keywords: vaccines, vaccinology, vaccine delivery, adjuvants, administration routes, protein stability, protein characterization, systems vaccinology, proteomics, transcriptomics

Theme: immunology, infection

Offering: immunogenicity studies, mucosal vaccination, in vivo imaging, mass spectrometry, proteome and transcriptome analysis, biosensor analysis, lyophilisation, spray drying, vaccine/protein stability studies, assay development, quality control, early clinical development

Looking for: vaccine leads, biopharmaceutical leads

Selected Recent Publications:

1. Metz B, Tilstra W, van der Put R, Spruit N, van den IJssel J, Robert J, Hendriksen C, Kersten G. 2013. Physicochemical and immunochemical assays for monitoring consistent production of tetanus toxoid. *Biologicals* 41: 231-237.
2. PC Soema, GJ Willems, K van Twillert, G van de Wijdeven, CJ Boog, GFA Kersten, JP Amorij. 2014. Solid Bioneedle-delivered influenza vaccines are highly thermostable and induce both humoral and cellular immune responses. *Plos One* 9(3): e92806.
3. Soema PC, Rosendahl Huber SK, Willems GJ, Jiskoot W, Kersten GF, Amorij JP. 2015. Influenza T-cell epitope-loaded virosomes adjuvanted with CpG as a potential influenza vaccine. *Pharm Res.* 32:1505-15.
4. Raeven RH, van der Maas L, Tilstra W, Uittenbogaard JP, Bindels TH, Kuipers B, van der Ark A, Pennings JL, van Riet E, Jiskoot W, Kersten GF, Metz B. 2015. Immunoproteomic Profiling of Bordetella pertussis Outer Membrane Vesicle Vaccine Reveals Broad and Balanced Humoral Immunogenicity. *J Proteome Res.* 14:2929-42.
5. Soema PC, Willems GJ, Jiskoot W, Amorij JP, Kersten G. 2015. Predicting the influence of liposomal lipid composition on liposome size, zeta potential and liposome-induced dendritic cell maturation using a design of experiments approach. *Eur J Pharm Biopharm.* 94:427-35

Bertrand Kleizen

Bijvoet Institute for Biomolecular Research, Faculty of Science, Department of Cellular Protein Chemistry

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Education and Experience

2009-present	Senior Postdoc: Bijvoet Center for Biomolecular Research, Dept. of Cellular Protein Chemistry (Prof. Braakman)
2007-2009	Postdoc: Neuroscience Campus Amsterdam (PI: Prof. Verhage)
2005-2007	Postdoc: UC Berkeley (PI: Prof. Schekman)
2000-2005	PhD Faculty of Chemistry, Utrecht University (supervisors Prof. Braakman and Prof. Tabak)

Research Keywords: protein folding/trafficking/membrane protein/CFTR/gamma-secretase/disease

Theme: neuroscience, immunology, cancer

Offering: In our laboratory we perform protein radiolabeling approaches in intact cells (in vivo) and semi-intact cells (in vitro) in order to understand how proteins fold and traffic in -and from the endoplasmic reticulum with time. We assay the structure of proteins in live cells by investigating their disulphide bond formation and/or protease susceptibility, followed by immunoprecipitations and analysis on SDS-PAGE gels. Besides learning how medically relevant proteins fold and traffic, and how patient mutations influence this, we also focus on when and how investigational drugs act during the folding process.

Looking for: ways to modify drugs to allow cross-linking to our target proteins, investigate mechanism of action of interesting new drugs, structural approaches to identify drug targets in proteins.

Selected Recent Publications:

1. Kleizen B., van Vlijmen T, de Jonge HR, Braakman I. Folding of CFTR is predominantly cotranslational (2005) *Molecular Cell* 20, 277-287.
2. Kim J., Kleizen B., Choy R., Thinakaran G., Sisodia SS., Schekman R., Biogenesis of gamma-secretase in the early secretory pathway. (2007) *J Cell Biol.* 179(5), 951-963.
3. Hoelen H.*, Kleizen B.*, Schmidt A, Richardson J, Charitou P, Thomas P., Braakman I., The primary folding defect and rescue of Δ F508 CFTR emerge during translation of the mutant domain. (* shared first author), (2010) *PLoS ONE* 5(11): e15458

Olaf H. Klungel

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Education and Experience

2015-present	Professor of Pharmacoepidemiologic Methods, Department of Pharmaceutical Sciences, University of Utrecht
2003-2015	Associate Professor, Department of Pharmaceutical Science, University of Utrecht
1999-2003	Assistant Professor, Department of Pharmaceutical Sciences, University of Utrecht
1998-1999	Postdoc, Cardiovascular Health Research Unit and Departments of Pharmacy and Epidemiology, University of Washington
1994-1998	PhD Pharmacoepidemiology, University of Utrecht (with Prof. de Boer and Prof. Bakker)

Other functions: Program leader research division of Pharmacoepidemiology & Clinical Pharmacology, Director Benefit-Risk Assessment Domain of European e-Learning Master Pharmacoepidemiology & Pharmacovigilance (EU2P), Director Pharmacoepidemiology specialization in Utrecht University Master Epidemiology.

Research Keywords: pharmacoepidemiological methods, biobanking, record linkage, molecular pharmacoepidemiology, cardiovascular diseases and risk factors

Theme: cardiovascular

Offering: Methods for observational drug research, pharmacoepidemiological / statistical methods to control for confounding, cardiovascular pharmacogenetic biobanks, infrastructure for linking biobanks and registries

Looking for: improved methods to assess benefit and harm of medicines

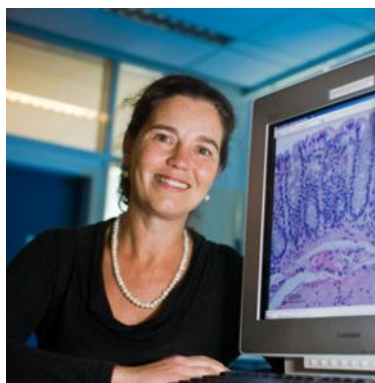
Selected Recent Publications:

1. Schmidt AF, Klungel OH, Groenwold RH; GetReal Consortium. Adjusting for Confounding in Early Postlaunch Settings: Going Beyond Logistic Regression Models. *Epidemiology*. 2016 Jan;27(1):133-42.
2. van den Ham HA, Klungel OH, Singer DE, Leufkens HG, van Staa TP. Comparative Performance of ATRIA, CHADS2, and CHA2DS2-VASc Risk Scores Predicting Stroke in Patients With Atrial Fibrillation: Results From a National Primary Care Database. *J Am Coll Cardiol*. 2015 Oct 27;66(17):1851-9.
3. Belitser SV, Martens EP, Pestman WR, Groenwold RH, de Boer A, Klungel OH. Measuring balance and model selection in propensity score methods. *Pharmacoepidemiol Drug Saf*. 2011 Nov;20(11):1115-29.
4. van der Baan FH, Klungel OH, Egberts AC, Leufkens HG, Grobbee DE, Roes KC, Knol MJ. Pharmacogenetics in randomized controlled trials: considerations for trial design. *Pharmacogenomics*. 2011 Oct;12(10):1485-92.
5. Martens EP, Pestman WR, de Boer A, Belitser SV, Klungel OH. Instrumental variables: application and limitations. *Epidemiology*. 2006 May;17(3):260-7.

Aletta D. Kraneveld

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Education and Experience

2003-present	Associate Professor, PI Neuro-immunopharmacology, Div Pharmacology, Dept Pharmaceutical Sciences, Faculty of Science, Utrecht University
1995-2002	Post Doc & assistant Professor, Dept Pharmacology & Pathophysiology, Faculty of Pharmaceutical Sciences, Utrecht University
1994-1995	Researcher Dept. Gastrointestinal Pharmacology Glaxo Group Research, Ware UK (Dr. C Spraggs) & Dept Pathology, Harvard Medical School, Boston, USA (Prof. Dr. S Galli and Dr. B Wershil)
1990-1994	Ph.D. Pharmacology, Utrecht University and Glaxo Group Research, Ware, UK (Prof. Dr. F Nijkamp, Dr. ASj Koster, Dr. MA Trevethick and Dr C. Spraggs)

Other functions: President FIGON (Netherlands Federation of Innovative Drug Research), member executive board EPHAR

Research Keywords: (neuro)immunopharmacology, gut-immune-brain axis

Theme: inflammatory bowel diseases, food allergy, autism spectrum disorders, Parkinson's Disease, neuro-immune interaction

Offering: in vitro models with intestinal neuronal cell line, epithelial cells, mast cells, PBMCs, co-culture models, in vivo models, immunoprofiling, behavioral studies, intervention studies with medical nutrition and pharmaceutical compounds

Looking for: new targets for bio-based therapies at the interface of immune and (central) nervous system

Selected Recent Publications:

1. Targeting chemokine receptors in chronic inflammatory diseases: An extensive review. Koelink PJ, Overbeek SA, Braber S, de Kruijf P, Folkerts G, Smit MJ, Kraneveld AD. *Pharmacol Ther.* 2012 133(1):1.
2. Pathways underlying the gut-to-brain connection in autism spectrum disorders as future targets for disease management. de Theije CG, Wu J, da Silva SL, Kamphuis PJ, Garssen J, Korte SM, Kraneveld AD. *Eur J Pharmacol.* 2011 668 Suppl 1:S70.
3. The two faces of mast cells in food allergy and allergic asthma: The possible concept of Yin Yang. Kraneveld AD, Sagar S, Garssen J, Folkerts G. *Biochim Biophys Acta.* 2012 1822(1):93
4. Ig-free light chains play a crucial role in murine mast cell-dependent colitis and are associated with human inflammatory bowel diseases. Rijnierse A, Redegeld FA, Blokhuis BR, Van der Heijden MW, Te Velde AA, Pronk I, Hommes DW, Nijkamp FP, Koster AS, Kraneveld AD. *J Immunol.* 2010 185(1):653.
5. Rijnierse, A, Kroese, ABA, Redegeld, FAM, van der Heijden, MW, Blokhuis, BR, Koster, AS, Timmermans, JP, Nijkamp, FP, Kraneveld, AD. Immunoglobulin-free light chains mediate the activation of mouse dorsal root ganglion neurons by antigen. *J Neuroimmunol.* 2009 208: 80

John A.W. Kruijtzter

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Education and Experience

2008-present	Assistant professor of Medicinal Chemistry and Chemical Biology, Utrecht University
2004-2008	Chief Scientist/Hotel manager, Chemical Expertise Research Hotel, Netherlands Proteomics Center, Utrecht University
2001-2004	Chief Scientist, Chemical Expertise Center, Academic Biomedical Center, Utrecht University
2000-2001	Senior Scientist Dept. of Medicinal Chemistry (UU) in collaboration with JARI Pharmaceuticals BV.
1998-2000	Postdoctoral Fellow (with prof. R.A.H. Adan, prof. W.H. Gispen and prof. R.M.J. Liskamp), Rudolf Magnus Institute, UMC Utrecht.
1996-1998	Postdoctoral Fellow (NWO) (with prof. R.M.J. Liskamp) Dept. of Medicinal Chemistry, Utrecht University
1992-1996	Ph.D. degree (with prof. R.M.J. Liskamp) Dept. of Medicinal Chemistry, Utrecht University
1985-1991	M.Sc. Molecular Sciences, Agricultural University Wageningen.

Research Keywords: complex (labeled) peptide synthesis, peptidomimetics, peptoid microarrays, synthetic vaccines, antimicrobial coatings, peptide targeted imaging.

Theme: infection, neuroscience, cancer

Offering: organic chemical synthesis especially of complex functionalized peptides/peptidomimetics, specializing on the protein-protein interface.

Looking for: biological targets and collaborations in our themes

Selected Recent Publications:

1. M.P.C. Mulder, J.A.W. Kruijtzter, E.J. Breukink, J. Kemmink, R.J. Pieters, R.M.J. Liskamp: 'Synthesis and evaluation of novel macrocyclic antifungal peptides'. *Bioorg. Med. Chem.* **2011**, *19*, 6505-6517.
2. T. Nuijens, E. Piva, J.A.W. Kruijtzter, D.T.S. Rijkers, R.M.J. Liskamp, P.J.L.M. Quaedflieg: 'Fully enzymatic N→C-directed peptide synthesis using C-terminal peptide α-carboxamide to ester interconversion'. *Adv. Synth. Catal.* **2011**, *353*, 1039-1044.
3. A. Bunschoten, J.H. Ippel, J.A.W. Kruijtzter, L. Feitsma, C.J.C. de Haas, R.M.J. Liskamp, J. Kemmink: 'A peptide mimic of the chemotaxis inhibitory protein of *Staphylococcus aureus*: Towards the development of novel anti-inflammatory compounds'. *Amino Acids* **2011**, *40*, 731-740.
4. A. Bunschoten, J.A.W. Kruijtzter, J.H. Ippel, C.J.C. de Haas, J.A.G. van Strijp, J. Kemmink, R.M.J. Liskamp: 'A general sequence independent solid phase method for the site specific synthesis of multiple sulfated-tyrosine containing peptides'. *Chem. Commun.* **2009**, 2999-3001.
5. C. Chamorro, J.A.W. Kruijtzter, M. Farsaraki, J. Balzarini, R.M.J. Liskamp: 'A general approach for the non-stop solid phase synthesis of TAC-scaffolded loops towards protein mimics containing discontinuous epitopes'. *Chem. Commun.* **2009**, 821-823.

Jürgen Küball

Clinical Department Translational Immunology/ Tumor Immunology, Department of Hematology, UMCU

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Education and Experience

2013-present Professor and head of Hematology department (adults), UMCU
2005-2007 Postdoctoral researcher at Fred Hutchinson Cancer Centre, Seattle, USA
1998-2004 Physician, Johannes Gutenberg University, Mainz, Germany

Other functions: Director of the Bone Marrow Transplantation Program; Chair of applied and tumor immunology at the Laboratory of Translation Immunology.

Research Keywords: transplantation; stem cells; malignant cells; infected cells

Theme: immunology, stem cell development, cancer

Offering:

Looking for:

Selected Recent Publications:

Frank J.M. van Kuppeveld

Virology Division, Faculty of Veterinary Medicine, Department of Infectious Diseases and Immunology

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www.uu.nl/faculty/veterinarymedicine/en/structure/departments/dii/organization/virology/pages/default.aspx



Education and Experience

- | | |
|--------------|---|
| 2012-present | Full professor in Molecular Virology, Department of Infectious Diseases and Immunology, Utrecht University |
| 2001-2007 | Assistant Professor (2001) and Associate Professor (2007) in Virology, Radboud University Medical Center Nijmegen |
| 1998-2000 | Postdoctoral research associate in Virology, Radboud University Medical Center Nijmegen |
| 1996-1998 | Postdoctoral research associate in Molecular Animal Physiology (group Prof. Gerard Martens, University of Nijmegen) |
| 1991-1996 | PhD Virology, Radboud University Medical Center Nijmegen (supervisors Dr. W. Melchers and Prof. J. Galama) |

Other functions: Head of Virology Division, Coordinator of ANTIVIRALS, a Marie Curie EU Innovative Training Network (ITN) on antiviral drug development.

Research Keywords: virus infection and replication, antiviral drugs, vaccines, innate immunity.

Theme: infection, immunology

Offering: viruses, assays to measure virus entry, translation and replication

Looking for: small molecule libraries, medicinal chemistry, structure-based drug design

Selected Recent Publications:

1. Strating J, van der Linden L, Albuлесcu L, Bigay J, Arita M, Delang L, Leyssen P, van der Schaar H, Lanke K, Thibaut H, Ulferts R, Drin G, Schlinck N, Wubbolts R, Sever N, Head S, Liu J, Beachy P, De Matteis M, Shair M, Olkkonen V, Neyts J, van Kuppeveld F. 2015. Itraconazole inhibits enterovirus replication by targeting the oxysterol binding protein. *Cell Rep* 10:600-615.
2. Van der Linden L, Vives-Adrian L, Selisko B, Ferrer-Orta, Liu X, Lanke K, Ulferts R, de Palma A, Tanchis F, Goris N, Lefebvre D, de Clercq K, Leyssen P, Lacroix C, Purstinger G, Coutard B, Canard B, Boehr D, Arnold J, Cameron C, Verdaguer N, Neyts J, van Kuppeveld F. 2015. The RNA template channel of the RNA-dependent RNA polymerase as a target for development of antiviral therapy of multiple genera with a virus family. *PLoS Pathog* e1004733.
3. van Kuppeveld F. 2014. Understanding virus replication is key to develop antiviral drugs. *Future Virology* 9:795-799.
4. van der Schaar H, Leyssen P, Thibaut H, de Palma A, van der Linden L, Lanke K, Lacroix C, Verbeken E, Conrath K, Macleod A, Mitchell D, Palmer N, van de Poel H, Andrews M, Neyts J, van Kuppeveld F. 2013. A novel, broad-spectrum inhibitor of enterovirus replication that targets host cell factor phosphatidylinositol 4-kinase III β . *Antimicrob Agents Chemother* 57:4971-4981.
5. Ulferts R, van der Linden L, Thibaut H, Lanke K, Leyssen P, Coutard B, de Palma A, Canard B, Neyts J, van Kuppeveld F. 2013. Selective serotonin reuptake inhibitor fluoxetine inhibits replication of human enterovirus B and D by targeting viral protein 2C. *Antimicrob Agents Chemother* 57:1952-1956.

Hubert G. Leufkens

Pharmacoepidemiology & Clinical Pharmacology, Faculty of Science, Department of Pharmaceutical Sciences.

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Education and Experience

- | | |
|--------------|---|
| 2012-present | Visiting professor Faculdade de Farmácia da Universidade de Lisboa |
| 2012-present | Member Senate European Federation for Pharmaceutical Sciences (EUFEPS) |
| 2007-present | Chairman of the Dutch Medicines Evaluation Board (MEB) |
| 2008-present | Scientific Director UU-WHO Collaborating Centre of Pharmaceutical Policy and Regulation |
| 1997-present | Full Professor of Pharmaco-epidemiology, University of Utrecht |
| 1987-1991 | PhD UU 'Pharmacy records in pharmacoepidemiology: studies on antiinflammatory and antirheumatic drugs'. |
| 1985 | Fulbright Fellow at the University of Minneapolis, US |

Other functions: Former PI TI Pharma Escher Project on regulatory science, several regulatory roles at EMA London, European Editor Pharmacoepidemiology and Drug Safety, **Jury Stichting Galenusprijs Nederland**

Research Keywords: regulatory science, pharmacoepidemiology, innovation science, pharmacovigilance, pharmaceutical policy analysis

Theme: cardiovascular, CNS, cancer

Offering: methodologically innovative approach for regulatory science, broad experienced and informed network on the interface between drug development, regulation and actual drug usage.

Looking for: relevant research questions to apply these methods

Selected Recent Publications:

1. Vermeer NS, Straus S, Mantel-Teeuwisse AK, Hidalgo-Simon A, Egberts A, Leufkens H, De Bruin ML. [Drug-induced progressive multifocal leukoencephalopathy: Lessons learned from contrasting natalizumab and rituximab.](#) Clin Pharmacol Ther. 2015; 98: 542-50.
2. Bazargani YT, de Boer A, Leufkens HG, Mantel-Teeuwisse AK. Essential medicines for COPD and asthma in low and middle-income countries. Thorax. 2014 Dec; 69(12): 1149-51.
3. Putzeist M, Mantel-Teeuwisse AK, Aronsson B, Rowland M, Gispen-de Wied CC, Vamvakas S, Hoes AW, Leufkens HG, Eichler HG. Factors influencing non-approval of new drugs in Europe. Nat Rev Drug Discov. 2012;11(12): 903-4.
4. Stefansdottir G, Knol MJ, Arnardottir AH, van der Elst ME, Grobbee DE, Leufkens HG, De Bruin ML. Safety learning from drugs of the same class: room for improvement. Clin Pharmacol Ther 2012; 91: 872-80.
5. Trotta F, Leufkens HG, Schellens JH, Laing R, Tafuri G. Evaluation of oncology drugs at the European Medicines Agency and US Food and Drug Administration: when differences have an impact on clinical practice. J Clin Oncol 2011 Jun 1; 29(16): 2266-72.

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Education and Experience

2013-present	Professor and Chair of Chemical Biology and Medicinal Chemistry, University of Glasgow
1994-present	Associate and full Professor (1996), Departments of Pharmaceutical Sciences and Chemistry, Utrecht University
1986-1994	Assistant Professor of Bio-organic Chemistry, University of Leiden
1983-1986	Post-doctoral research associate in the groups of Prof. I.B. Weinstein and Prof. W.C. Still, Columbia University, New York
1979-1982	Ph.D. Organic Chemistry, University of Nijmegen (with Dr. H.J.C Ottenheijm and Prof. R.J.F. Nivard)

Other functions: Scientific Advisory Board Member of Cristal Therapeutics; Consultant of Synthon Biopharmaceuticals; Member External Advisory Board BBSRC Doctoral Training Program of Universities of Leeds, York and Sheffield; Cancer Research UK Glasgow Centre Management Board member.

Research Keywords: modified peptides, peptidomimetics, dendrimers, protein mimics including synthetic vaccines.

Theme: infection, cancer

Offering: organic chemical and peptide (mimic) synthesis, specializing on the protein-protein interface

Looking for: biological targets in our themes

Selected Recent Publications:

1. Hijnen, M.; Van Zoelen, D.J.; Chamorro, C.; Van Gageldonk, P.; Mooi, F.R.; Berbers, G.; Liskamp, R.M.J.; A novel strategy to mimic discontinuous protective epitopes using a synthetic scaffold, *Vaccine*, (2007), 25, 6807-6817.
2. LTM van Wandelen, J van Ameijde, AF Ismail-Ali, HC Quarles van Ufford, LAW Vijftigschild, JM Beekman, NI Martin, R Ruijtenbeek, RMJ Liskamp, *Cell-Penetrating Bisubstrate-Based Protein Kinase C Inhibitors*, *CS Chemical Biology* (2013), 8, 1479-1487.
3. Yim, C. B.; Dijkgraaf, I.; Merks, R.; Versluis, C.; Eek, A.; Mulder, G. E.; Rijkers, D. T. S.; Boerman, O.C.; Liskamp, R. M. J. Synthesis of DOTA-Conjugated Multimeric [Tyr³]Octreotide Peptides via a Combination of Cu(I)-Catalyzed "Click" Cycloaddition and Thio Acid/Sulfonyl Azide "Sulfo-Click" Amidation and Their in Vivo Evaluation, *J. Med. Chem.*, (2010), 53, 3944-3953

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Education and Experience

2006-present	CEO Merus BV
2002-2003	Chief Scientific Officer Crucell
1996-2000	Founder and CEO of U-BiSys BV
1996- 2003	Professor in Immunology, department of Immunology, University Medical Center Utrecht
1987-1989	Howard Hughes Postdoctoral Fellow at Columbia University, New York
1983-1987	PhD Immunology, Utrecht University (supervisor Prof. Dr. R. Ballieux)

Other functions: Founding Director of The Hub for Organoids Technology

Research Keywords: targeted therapy, cancer, therapeutic antibodies

Theme: immunology, cancer

Offering: Therapeutic bispecific human antibodies

Looking for: in vitro assays and animal models for discovery and validation of antibodies against checkpoint modulators.

Anke-Hilse Maitland-van der Zee

Pharmacoepidemiology and Clinical Pharmacology, Faculty of Science,
Department of Pharmaceutical Sciences

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Education and Experience

2012-present	Associate professor in Personalized Medicine
2005- 2011	Assistant professor in Pharmacogenetics, Department of Pharmaceutical Sciences Utrecht University.
2003-2005	Postdoc in the group of Prof. Dr. E. Boerwinke, School of Public Health, Human Genetics Center, University of Texas, Houston Tx, USA
1999-2003	PhD Pharmacogenetics, Utrecht University (supervisors Prof. Dr. A. de Boer and Prof. Dr. H.G.M Leufkens)

Other functions: Coordinator for the development of a new focus area "Future Medicine" for Utrecht University, Member of the board of the NVKF& B (Netherlands Organisation of Clinical Pharmacology and Biopharmaceutical sciences), Past-Chair and member of the Steering committee of the EUFEPS European Research Network on Pharmacogenetics/genomics, Vice-chair of special interest group "Individualised Medicine" of the International Federation of Pharmacy (FIP), Member of the Working Group Pharmacogenetics of the Netherlands Royal Society for the advancement of Pharmacy (KNMP)

Research Keywords: pharmacogenetics/genomic, pediatric asthma, cardiovascular drugs, pediatric oncology, personalized medicine, infection and immunity, anticoagulation therapy, biomarkers, systems pharmacology

Theme: cardiovascular, immunology, cancer

Offering: personalized medicine, pharmacoepidemiology

Looking for: gene-drug interactions, clinically relevant biomarkers

Selected Recent Publications:

1. Vijverberg SJ, Koster ES, Tavendale R, Leusink M, Koenderman L, Raaijmakers JA, Postma DS, Koppelman GH, Turner SW, Mukhopadhyay S, Tse SM, Tantisira KG, Hawcutt DB, Francis B, Pirmohamed M, Pino-Yanes M, Eng C, Burchard EG, Palmer CN, Maitland-van der Zee AH. ST13 polymorphisms and their effect on exacerbations in steroid-treated asthmatic children and young adults. *Clin Exp Allergy*. 2015;45:1051-9
2. Leusink M, Onland-Moret NC, Asselbergs FW, Ding B, Kotti S, van Zuydam NR, Papp AC, Danchin N, Donnelly L, Morris AD, Chasman DI, Doevendans PA, Klungel OH, Ridker PM, van Gilst WH, Simon T, Nyberg F, Palmer CN, Sadee W, van der Harst P, de Bakker PI, de Boer A, Verstuyft C, Maitland-van der Zee AH. Cholesteryl Ester Transfer Protein Polymorphisms, Statin Use, and Their Impact on Cholesterol Levels and Cardiovascular Events. *Clin Pharmacol Ther*. 2014; 95:314-20.
3. Verhoef TI, Ragia G, de Boer A, Barallon R, Kolovou G, Kolovou V, Konstantinides S, Le Cessie S, Maltezos E, van der Meer FJ, Redekop WK, Remkes M, Rosendaal FR, van Schie RM, Tavridou A, Tziakas D, Wadelius M, Manolopoulos VG, Maitland-van der Zee AH; EU-PACT Group. A randomized trial of genotype-guided dosing of acenocoumarol and phenprocoumon. *N Engl J Med*. 2013; 12;369:2304-12.
4. Zuurhout MJ, Vijverberg SJ, Raaijmakers JA, Koenderman L, Postma DS, Koppelman GH, Maitland-van der Zee AH. Arg16 ADRB2 genotype increases the risk of asthma exacerbation in children with a reported use of long-acting Beta-2-agonists: results of the PACMAN cohort. *Pharmacogenomics*. 2013;14:1965-71.
5. Vijverberg SJ, Koenderman L, van Erp FC, van der Ent CK, Postma DS, Brinkman P, Sterk PJ, Raaijmakers JA, Maitland-van der Zee AH. Inflammatory phenotypes underlying uncontrolled childhood asthma despite inhaled corticosteroid treatment: rationale and design of the PACMAN2 study. *BMC Pediatr*. 2013; 15;13:94.

Jos Malda

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Education and Experience

2010-present	Assistant Professor Department of Orthopaedics, UMCU
2010-present	Adjunct Associate Professor, Queensland University of Technology, Brisbane, Australia
2007-2010	Veni Laureate Research Fellow, Department of Orthopaedics, UMCU
2004-2007	Research Fellow, Queensland University of Technology, Brisbane, Australia

Other functions: Board member of the International Cartilage Repair Society

Research Keywords: Cartilage, chondrocytes, osteochondral regeneration, biofabrication, oxygen, tissue organization, in vivo models

Theme: development

Offering: bioprinting facility, in vivo evaluation of joint repair

Looking for: Hydrogels systems, bioreactors

Selected Recent Publications:

1. Catt C., Schuurman W., Sengers B., Please C.P.P., Dhert W.J.A., van Weeren P.R. and Malda J. (2011) Mathematical modelling of tissue formation in chondrocyte filter cultures. *European Cells & Materials* 22: 377-392
2. Melchels F.P.W., Domingos M.N.O., Klein T.J., Malda J., Bartolo P. and Huttmacher D.W. (2012) Additive manufacturing of tissues and organs. *Progress in Polymer Science*, in press
3. Fedorovich N.E., Schuurman W., Wijnberg H.M., van Weeren P.R., Malda J., Alblas J. and Dhert W.J.A. (2012) Biofabrication of osteochondral tissue equivalents by printing topologically defined, cell-laden hydrogel scaffolds. *Tissue Engineering*, in press
4. Schuurman W., Khristov V., Pot M.W., van Weeren P.R., Dhert W.J.A., and Malda J. (2011) Hybrid bioprinting technique to generate organized constructs with improved mechanical properties. *Biofabrication* 3(2):021001
5. Rouwkema J., Gibbs S., Lutolf M.P., Martin I., Vunjak-Novakovic G. and Malda J. (2011) In vitro platforms for tissue engineering: implications to basic research and clinical translation. *Journal of Tissue Engineering and Regenerative Medicine* 5(8):e164-7

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Education and Experience

2016-present	Associate Professor Department of Medicinal Chemistry & Chemical Biology Utrecht University
2010-2015	Assistant Professor Department of Medicinal Chemistry & Chemical Biology Utrecht University
2007-2010	Junior Principle Investigator Department of Medicinal Chemistry & Chemical Biology Utrecht University
2004-2007	Postdoctoral Fellow Department of Chemistry University of California, Berkeley
1999-2004	Ph.D. Bioorganic Chemistry Department of Chemistry University of Alberta

Research Keywords: Bioorganic & Medicinal Chemistry, Antibiotics, Antivirals, Epigenetics, *N*-methyltransferase inhibitors

Selected Recent Publications:

1. 't Hart, P., Oppedijk, S.F., Breukink, E., ***Martin, N.I.** New Insights into Nisin's Antibacterial Mechanism Revealed by Binding Studies with Synthetic Lipid II Analogues. *Biochemistry*. **2016** (In Press) DOI: 10.1021/acs.biochem.5b01173.
2. Koopmans, T.; Wood, T.M.; 't Hart, P.; Kleijn, L.H.J.; Hendrickx, A.P.A.; Willems, R.J.L.; Breukink, E.; ***Martin, N.I.** Semisynthetic lipopeptides derived from nisin display antibacterial activity and lipid II-binding on par with that of the parent compound. *Journal of the American Chemical Society* **2015**, *137*, 9382–9389.
3. van Haren, M.; Quarles van Ufford, L.; Moret, E.E.; ***Martin, N.I.** Synthesis and evaluation of protein arginine *N*-methyltransferase inhibitors designed to simultaneously occupy both substrate binding sites. *Organic and Biomolecular Chemistry* **2015**, *13*, 549-560.
4. Mooney, C.A.; Johnson, S.A.; 't Hart, P.; Quarles van Ufford, L.; de Haan, C.A.M.; Moret, E.E.; ***Martin, N.I.** Oseltamivir analogues bearing *N*-substituted guanidines as potent neuraminidase inhibitors. *Journal of Medicinal Chemistry* **2014**, *57*, 3154–3160.
5. 't Hart P.; Kleijn, L.H.J.; de Bruin, G.; Oppedijk, S.F.; Kemmink, J.; ***Martin, N.I.** A combined solid- and solution-phase approach provides convenient access to analogues of the calcium-dependent lipopeptide antibiotics. *Organic and Biomolecular Chemistry* **2014**, *12*, 913-918.

Roos Masereeuw

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Education and Experience

2015-present	Full professor in Experimental Pharmacology
1997-2015	Assistant professor and Associate professor (2002) in Pharmacology and Toxicology, Radboudumc, Nijmegen
1996-1997	
1992-1996	PhD Medical Sciences, Radboud University, Nijmegen (supervisors Prof. F.G.M. Russel and Prof. P. Smits)

Other functions: President of the Dutch Pharmacological Society, member of the Zon-MW Veni and TOP Grant Committees

Research Keywords: Bioartificial kidney, human epithelial cells, tissue function repair, pharmacokinetics

Theme: regenerative medicine, nephrology

Offering: 3D cell culture, organ on chip, life cell imaging

Looking for: human induced pluripotent stem cell technology, disease models

Selected Recent Publications:

1. Wilmer MJ, Ng CP, Lanz H, Vulto P, Suter-Dick L, Masereeuw R. Kidney on-a-chip technology for drug-induced nephrotoxicity screening. *Trends Biotechnol.*, (2016), *in press*.
2. Jansen J, De Napoli IE, Fedecostante M, Schophuizen CM, Chevtchik NV, Wilmer MJ, van Asbeck AH, Croes HJ, Pertijs JC, Wetzels JF, Hilbrands LB, van den Heuvel LP, Hoenderop JG, Stamatialis D, Masereeuw R. Human proximal tubule epithelial cells cultured on hollow fibers: living membranes that actively transport organic cations. *Sci Rep.* (2015), 5, 16702.
3. Poesen R, Mutsaers HA, Windey K, van den Broek PH, Verweij V, Augustijns P, Kuypers D, Jansen J, Evenepoel P, Verbeke K, Meijers B, Masereeuw R. The Influence of Dietary Protein Intake on Mammalian Tryptophan and Phenolic Metabolites. *PLoS One.* (2015) 10(10), e0140820.
4. Peters E, Geraci S, Heemskerk S, Wilmer MJ, Bilos A, Kraenzlin B, Gretz N, Pickkers P, Masereeuw R. Alkaline phosphatase protects against renal inflammation through dephosphorylation of lipopolysaccharide and adenosine triphosphate. *Br J Pharmacol.* (2015) 172(20), 4932-4945.
5. Jansen J, Fedecostante M, Wilmer MJ, van den Heuvel LP, Hoenderop JG, Masereeuw R. Biotechnological challenges of bioartificial kidney engineering. *Biotechnol Adv.* (2014) 32(7),1317-1327.

Madelon M. Maurice

UMCU, Division DBG, Department of Cell Biology

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Education and Experience

2006-present	Associate Professor, Department of Cell Biology, University Medical Center Utrecht
2001-2005	Senior post-doctoral fellow in the group of Prof. Hans Clevers, Hubrecht Institute, Utrecht
1998-2001	Post-doctoral fellow in the group of Prof. Hidde Ploegh, Harvard Medical School, Boston, USA
1993-1998	PhD thesis work at the Department of Rheumatology, Leiden University Medical Center, Leiden (with Dr. Cor Verweij and Prof. Ferdinand Breedveld)

Other functions:

Research Keywords: Cellular signalling, reporter assays, protein-protein interactions, ubiquitination, (live) cell imaging, immuno-EM, protein purification, cancer mutations

Theme: Wnt signaling, cancer, (stem) cell biology

Offering: Dissecting cellular signaling at the molecular level in cells and complex tissues

Looking for: proteomics-based analysis of protein complexes and modifications, peptide arrays, protein interaction mimics, identifying & developing therapeutics

Selected Recent Publications:

1. Gerlach JP, Emmink B, Nojima, H, Kranenburg O, Maurice MM (2014) Wnt signalling induces accumulation of phosphorylated β -catenin in two distinct cytosolic complexes, *Open Biology* Nov;4(11):140120
2. Consonni SV, Maurice MM, Bos JL (2014) DEP domains: structurally similar but functionally different, *Nature Rev Mol Cell Biol*, 15: 357–362.
3. Koo BK, Spit M, Jordens I, Low TY, Stange DE, van de Wetering M, van Es JH, Mohammed S, Heck AJR, Maurice MM* and Clevers H* (2012) Tumour suppressor RNF43 is a stem cell E3 ligase that induces endocytosis of Wnt receptors. *Nature*,488:665-669 (*corresponding)
4. Tauriello DVF, Jordens I, Kirchner K, Slootstra J, Kruitwagen T, Bouwman, BAM, Rudiger SGD, Schwamborn K, Schambony A, Maurice MM* (2012). Dvl employs its DEP domain and C-terminus to bind a discontinuous motif in the Fz receptor and initiate Wnt/ β -catenin signalling. *Proc Natl Acad Sci U S A*. 109(14):E812-20 (*corresponding)
5. Tauriello DVF, Haegebarth A, Kuper I, Canninga-van Dijk M, Edelmann MJ, Henraat M, Kessler, BM, Clevers H, Maurice MM (2010) Loss of the tumor suppressor CYLD enhances Wnt/ β -catenin signaling through K63-linked ubiquitination of Dvl. *Mol Cell* 37: 607-619

Koen Mertens

Pharmaceutics, Faculty of Science, Dept. of Pharmaceutical Sciences and Sanquin Research, Amsterdam

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Education and Experience

1999-present	Professor Pharmaceutical Plasma Proteins (part-time)
1982-present	Postdoc, staff member and department head at Sanquin Blood Supply Foundation, Amsterdam
1978-1982	Ph.D. at Faculty of Medicine, Leiden University
1970-1978	M.Sc. in Biochemistry/Immunology, Utrecht University

Other functions: Principle Investigator, Dept. Plasma Proteins, Sanquin, Amsterdam

Theme: (cardio)vascular, immunology

Offering: biotechnology, protein engineering, mass spectrometry, cellular imaging

Looking for: complementary knowledge

Selected Recent Publications:

[1] van den Biggelaar M, Madsen JJ, Faber JH, Zuurveld MG, van der Zwaan C, Olsen OH, Stennicke HR, Mertens K, Meijer AB. Factor VIII Interacts with the Endocytic Receptor Low-Density Lipoprotein Receptor-Related Protein 1 via an Extended Surface Comprising 'Hot-Spot' Lysine Residues. *J Biol Chem.* 2015;290(27):16463-76.

[2] Bloem E, Ebberink EH, van den Biggelaar M, van der Zwaan C, Mertens K, Meijer AB. A novel chemical footprinting approach identifies critical lysine residues involved in the binding of receptor-associated protein to cluster II of LDL receptor-related protein. *Biochem J.* 2015;468(1):65-72.

[3] van den Biggelaar M, Hernandez-Fernaud, van den Eshof BL, Neilson LJ, Meijer AB, Mertens K, Zanivan S. Quantitative phosphoproteomics unveils temporal dynamics of thrombin signalling in human endothelial cells. *Blood* 2014;123(12):e22-36.

[4] Bloem E, van den Biggelaar M, Wroblewska A, Voorberg J, Faber JH, Kjalke M, Stennicke HR, Mertens K, Meijer AB. Factor VIII C1 domain spikes 2092-2093 and 2158-2159 comprise regions that modulate cofactor function and cellular uptake. *J Biol Chem.* 2013;288(41):29670-9.

[5] Bouwens EA, Mourik MJ, van den Biggelaar M, Eikenboom JC, Voorberg J, Valentijn KM, Mertens K. Factor VIII alters tubular organization and functional properties of von Willebrand factor stored in Weibel-Palade bodies. *Blood.* 2011;118(22):5947-56.

[6] van Haren SD, Herczenik E, ten Brinke A, Mertens K, Voorberg J, Meijer AB. HLA-DR-presented peptide repertoires derived from human monocyte-derived dendritic cells pulsed with blood coagulation factor VIII. *Mol Cell Proteomics.* 2011;10(6):M110.002246.

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<http://www.tumor-immunology-utrecht.nl/stefan-nierkens/>



Education and Experience

2012-present	Head U-DAIR, PI Boelens-Nierkens group
2010-2012	Postdoc, NCMLS, Nijmegen
2007- 2010	Postdoc , LIAI, La Jolla
2005-2007	Postdoc, NCMLS, Nijmegen
1999-2005	PhD Immunology, IRAS, Utrecht University

Other functions: Medical Immunologist in training, co-promotor, reviewer for journals and grants

Research Keywords: Immunotherapy, Immune monitoring, dendritic cell vaccination

Theme: Immunology

Offering: Immune monitoring program for patient cohorts with immune-mediated disease and cancer. Dendritic cell research.

Looking for: Biomarker research, clinically well-defined patient cohorts, Cancer immunotherapeutic approaches

Selected Recent Publications:

1. **Nierkens S**, Lankester AC, Egeler RM, Bader P, Locatelli F, Pulsipher MA, Bollard CM, Boelens JJ; Westhafen Intercontinental Group. Challenges in the harmonization of immune monitoring studies and trial design for cell-based therapies in the context of hematopoietic cell transplantation for pediatric cancer patients. *Cytotherapy*. 2015 Dec;17(12):1667-74.
2. Spel L, Boelens JJ, van der Steen DM, Blokland NJ, van Noesel MM, Molenaar JJ, Heemskerk MH, Boes M, **Nierkens S**. Natural killer cells facilitate PRAME-specific T-cell reactivity against neuroblastoma. *Oncotarget*. 2015 Nov 3;6(34):35770-81.
3. de Haar C, Plantinga M, Blokland NJ, van Til NP, Flinsenberg TW, Van Tendeloo VF, Smits EL, Boon L, Spel L, Boes M, Boelens JJ, **Nierkens S**. Generation of a cord blood-derived Wilms Tumor 1 dendritic cell vaccine for AML patients treated with allogeneic cord blood transplantation. *Oncoimmunology*. 2015 May 27;4(11):e1023973.
4. de Koning C, Plantinga M, Besseling P, Boelens JJ, **Nierkens S**. Immune Reconstitution after Allogeneic Hematopoietic Cell Transplantation in Children. *Biol Blood Marrow Transplant*. 2015 Sep 1. pii: S1083-8791(15)00576-5.
5. **Nierkens S**, Tel J, Janssen EM, Adema GJ. Cross-presentation by dendritic cell subsets: One general or all sergeants? *Trends in Immunology*, 34(8): 361-70 (2013).

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Education and Experience

2009-present	Senior scientist, Dept Biochemistry & Cell Biology, Fac Veterinary Medicine, Utrecht University
2006-2009	Post-doc, Dept Biochemistry & Cell Biology, Fac Veterinary Medicine, Utrecht University
2004- 2006	Post-doc, Imperial College London, Div. Cell and Molecular Biology, London, UK
1999-2004	Dept Immunology, Fac Veterinary Medicine, Utrecht University (with Prof M.H.M. Wauben and Prof. W. van Eden)

Other functions:

- Member of the Editorial Board of the Journal of Extracellular Vesicles (2012)
- Substitute Member Management Committee EU COST Action: BM1202 European Network on Microvesicles and Exosomes in Health and Disease (2012)

Research Keywords: exosomes, microvesicles, extracellular vesicles, immune cells, small RNA, intercellular communication

Theme: immunology

Offering: characterization of subpopulations of extracellular vesicles, high-resolution flow cytometric analysis of individual extracellular vesicles, Vesicle-associated small RNA analysis

Looking for: characteristics of diverse extracellular vesicle subpopulations

Selected Recent Publications:

1. [E.N.M. Nolte-`t Hoen](#), H. P. J. Buermans, M. Waasdorp, W. Stoorvogel, M. H. M. Wauben, and P. A. C. `t Hoen. Deep sequencing of RNA from immune cell-derived vesicles uncovers the selective incorporation of small noncoding RNA biotypes with potential regulatory functions. **Nucleic Acids Research** 2012 Jul 19. [Epub ahead of print]
2. [E.N.M. Nolte-`t Hoen](#), E. J. van der Vlist, M. Aalberts, H. C.H. Mertens, B J Bosch, W. Bartelink, E. Mastrobattista, E.V.B. van Gaal, W. Stoorvogel, G.J.A. Arkesteijn, and M.H.M. Wauben. Quantitative and qualitative flow cytometric analysis of nano-sized cell-derived membrane vesicles. **Nanomedicine** 2012 Jul;8(5):712-20.
3. E. J. van der Vlist, [E.N.M. Nolte-`t Hoen](#)*, W. Stoorvogel, G.J.A. Arkesteijn, and M.H.M. Wauben. Fluorescent labeling of nano-sized vesicles released by cells and subsequent quantitative and qualitative analysis by high-resolution flow cytometry. **Nature Protocols** 2012 Jun 14;7(7):1311-26.
4. [E.N.M. Nolte-`t Hoen](#), S. I. Buschow, S.M. Anderton, W. Stoorvogel, and M.H.M. Wauben. Activated T-cells recruit exosomes secreted by dendritic cells via LFA-1. **Blood** 2009 Feb 26; 113(9):1977-81.

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Education and Experience

1999-present	Assistant and Associate Professor (2004), Departments of Pharmaceutical Sciences, Utrecht University
1997-1999	Assistant Professor of Coatings Technology, Eindhoven University of Technology
1996-1997	Post-doctoral research associate at Philips Research, Eindhoven, The Netherlands
1990-1996	Ph.D. Physical Organic Chemistry, University of Nijmegen (with Prof. dr. R.J.M. Nolte)

Research Keywords: drug delivery systems, nanomedicines, polymer micelles, hydrogels, microspheres, biodegradable polymers, controlled release, photodynamic therapy, molecular imprinting.

Theme: cardiovascular, cancer

Offering: methods to control and target delivery of "difficult" drugs, including poorly soluble drugs and protein therapeutics; design of drug delivery systems.

Looking for: clinically relevant situations where therapy can benefit from improved drug delivery

Selected Recent Publications:

1. E. Verheyen, S. van der Wal, H. Deschout, K. Braeckmans, S. de Smedt, A. Barendregt, W.E. Hennink, C.F. van Nostrum, *Protein macromonomers containing reduction-sensitive linkers for covalent immobilization and glutathione triggered release from dextran hydrogels*, J. Controlled Release, 156 (2011), 329-336.
2. M. Talelli, C.J.F. Rijcken, S. Oliveira, R. van Meel, P.M.P. van Bergen Henegouwen, C.F. van Nostrum, T. Lammers, G. Storm, W.E. Hennink, *Nanobody - shell functionalized thermosensitive core-crosslinked polymeric micelles for active drug targeting*, J. Controlled Release, 151 (2011), 183-192.
3. A.H. Ghassemi, M.J. van Steenbergen, H. Talsma, C.F. van Nostrum, W. Jiskoot, D.J.A. Crommelin, W. E. Hennink, *Preparation and characterization of protein loaded microspheres prepared from a hydroxylated aliphatic polyester, poly(lactic-co-hydroxymethyl glycolic acid)*, J. Controlled Release, 138 (2009), 57-63.
4. C.J.F. Rijcken, J.W. Hofman, F. van Zeeland, C.F. van Nostrum, W.E. Hennink, *Photosensitizer-loaded biodegradable polymeric micelles: preparation, characterisation and in vitro PDT efficacy*, J. Contr. Release, 124 (2007), 144-153.
5. C.J.F. Rijcken, O. Soga, W.E. Hennink, C.F. van Nostrum, *Triggered destabilization of polymeric micelles and vesicles by changing core polarity: a new tool for drug delivery*, J. Controlled Release, 120 (2007), 131-148.

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Education and Experience

2012-present	Research fellow – VENI NWO-STW Departments of Biology, Utrecht University
2010-2012	Postdoctoral researcher Department of Pathology, University Medical Center Utrecht
2008-2010	Postdoctoral researcher Department of Biology, Utrecht University
2004-2008	Ph.D. Drug Delivery and Drug Targeting Department of Pharmaceutical Sciences, Utrecht University (with Prof. G. Storm and Prof. R. Schiffelers)
1998-2004	Degree on Pharmaceutical Sciences, University of Coimbra, Portugal

Other functions: member of the Editorial board of the Journal of Molecular Biology and Molecular Imaging

Research Keywords: cancer targeting, nanobodies, photodynamic therapy, molecular imaging

Theme: cancer targeting for imaging and therapy

Offering: preclinical evaluation in molecular imaging and targeted cancer therapy

Looking for: specific cancer therapies, translational research

Selected Recent Publications:

1. Heukers R, van Bergen En Henegouwen PM, Oliveira S; Nanobody-photosensitizer conjugates for targeted photodynamic therapy, *Nanomedicine* **(2014)** 10(7):1441-51
2. Oliveira S, Heukers R, Sornkom J, Kok RJ, van Bergen En Henegouwen PM; Targeting tumors with nanobodies for cancer imaging and therapy, *J Control Release* **(2013)** 172(3):607-17
3. Oliveira S, van Dongen GAMS, Stigter-van Walsum M, Roovers RC, Stam JC, Mali W, van Diest PJ, van Bergen en Henegouwen PMP; Rapid visualization of human tumor xenografts through optical imaging with a near-infrared fluorescent anti-EGFR nanobody, *Molecular Imaging* **(2012)** 11(1):33-46

Paul W.H.I. Parren, PhD

Senior Vice President & Scientific Director, Genmab

p.parren@genmab.com



Education and Experience

2010-present	Scientific Director Genmab
2008-2010	SVP Research & Preclinical Development, Genmab
2003-2008	VP Research & Technology, Genmab
2002-2003	Director Research & Development, Genmab, Utrecht, the Netherlands
2001-2002	Associate Professor, The Scripps Research Institute
1996-2001	Assistant Professor, The Scripps Research Institute
1993-1996	(Sr) Research Associate, The Scripps Research Institute, La Jolla, CA
1992-1993	Sr Research Associate, Baxter Diagnostics, Miami, FL
1987-1992	PhD Molecular Immunology. Central Laboratory of the Netherlands Blood Transfusion Service & University of Amsterdam, Amsterdam.

Research Keywords: Immunotherapy, therapeutic antibody, bispecific antibodies, antibody-drug conjugates, effector function, mechanism of action, cancer, infectious disease

Theme: Immunology

Looking for: Antibody knowledge

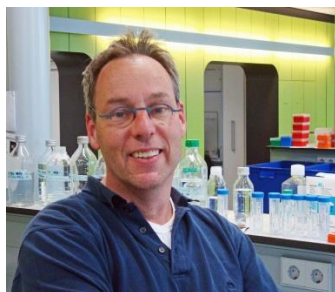
Selected Recent Publications:

1. Overdijk, M.B., S. Verploegen, J.H. van den Brakel, J.J. Lammerts van Bueren, T. Vink, J.G.J. van de Winkel, **P.W.H.I. Parren**, W.K. Bleeker. 2011. Epidermal Growth Factor Receptor (EGFR) antibody-induced Antibody-Dependent Cellular Cytotoxicity plays a prominent role in inhibiting tumorigenesis, even of tumor cells insensitive to EGFR signaling inhibition. *J Immunol.* 187:3383-3390.
2. Lammerts van Bueren J.J., T. Rispens, S. Verploegen, T. van der Palen-Merkus, S. Stapel, L.J. Workman, H. James, P.H.C. van Berkel, J.G.J. van de Winkel, T.A.E. Platts-Mills and **P.W.H.I. Parren**. 2011. Anti-galactose- α -1,3-galactose IgE from allergic patients does not bind α -galactosylated glycans attached on intact therapeutic antibody Fc domains. *Nature Biotechnol.* 29:574-576.
3. De Weers, W., Y-T. Tai, M. van der Veer, J.M. Bakker, T. Vink, D.C.H. Jacobs, L.A. Oomen, M. Peipp, T. Valerius, J.W. Slootstra, T. Mutis, W.K. Bleeker, K.C. Anderson, H.M. Lokhorst, J.G.J. van de Winkel, and **P.W.H.I. Parren**. 2011. Daratumumab, a novel therapeutic human CD38 monoclonal antibody, effectively induces killing of multiple myeloma tumor cells and other hematological cancers. *J. Immunol.* 186:1840-1848.
4. Labrijn, A.F., A.O. Buijsse, E.T.J. van den Bremer, A.Y.W. Verwilligen, W.K. Bleeker, S.J. Thorpe, J. Killestein, C.H. Polman, R.C. Aalberse, J. Schuurman, J.G.J. van de Winkel and **P.W.H.I. Parren**. 2009. Therapeutic IgG4 antibodies engage in Fab arm exchange with patients' IgG4 in vivo. *Nature Biotechnol.* 27: 767-71.
5. Van der Neut Kofschoten, M., J. Schuurman, M. Losen, W.K. Bleeker, P. Martínez-Martínez, E. Vermeulen, T.H. den Bleker, L. Wiegman, T. Vink, L.A. Aarden, M.H. De Baets, J.G.J. van de Winkel, R.C. Aalberse and **P.W.H.I. Parren**. 2007. Anti-inflammatory activity of human IgG4 antibodies by dynamic Fab arm exchange. *Science* 317: 1554-1557

Louis C. Penning

Department of Clinical Sciences of Companion Animals, Faculty of Veterinary Medicine

L.C.Penning@uu.nl



Education and Experience

2002-present	Post-doc, UD, UHD at the Department Clinical Sciences of Companion Animals, Utrecht University
1998-2002	Post-doc, LACDR, Leiden University (Prof van Berkel)
1996-1998	Post-doc, Radboud University, Nijmegen, Molecular Zoology (Prof Martens)
1994-1996	Post-doc, Molecular Biology, Gent, Belgium (Prof Fiers)
1989-1993	PhD-student, Medical Biochemistry, Leiden University (Prof van Steveninck)

Other functions:

Section editor BMC Veterinary Research
Editor for BMC Molecular Biology
Co-chair PhD-school Regenerative Medicine

Research Keywords: regenerative medicine, liver, intervertebral disc, pituitary, expression profiling, adult stem cells

Theme: stem cells, cancer

Offering: specific animal species, which serve both as experimental animals both also to evaluate clinical applications of new therapeutic developments

Looking for: small molecules to stimulate proliferation or differentiation in iPS and adult stem cells for experimental and clinical applications.

Selected Recent Publications:

Organoids are a powerful tool for the study of liver disease and personalized treatment design in humans and animals. Nantasanti S, de Bruin A, Rothuizen J, **Penning LC**, Schotanus BA. *Stem Cells Translational Medicine*. *In press*.

[Characterization and comparison of canine multipotent stromal cells derived from liver and bone marrow](#). Malagola E, Teunissen M, van der Laan LJ, Verstegen M, Schotanus BA, van Steenbeek FG, **Penning LC**, van Wolferen ME, Tryfonidou MA, Spee B. *Stem Cells Dev*. 2015 Oct 14. [*Epub ahead of print*]

[Disease Modeling and Gene Therapy of Copper Storage Disease in Canine Hepatic Organoids](#)

Nantasanti S, Spee B, Kruitwagen HS, Chen C, Geijssen N, Oosterhoff LA, van Wolferen ME, Pelaez N, Fieten H, Wubbolts RW, Grinwis GC, Chan J, Huch M, Vries RR, Clevers H, de Bruin A, Rothuizen J, **Penning LC**, Schotanus BA. *Stem Cell Reports*. 2015 Nov 10;5(5):895-907

[New canine models of copper toxicosis: diagnosis, treatment, and genetics](#)

Fieten H, **Penning LC**, Leegwater PA, Rothuizen J. *Ann N Y Acad Sci*. 2014 May;1314:42-8

[MIQE précis: Practical implementation of minimum standard guidelines for fluorescence-based quantitative real-time PCR experiments](#). Bustin SA, Beaulieu JF, Huggett J, Jaggi R, Kibenge FS, Olsvik PA, **Penning LC**, Toegel S. *BMC Mol Biol*. 2010 Sep 21;11:74.

Roland J. Pieters

Medicinal Chemistry and Chemical Biology, Faculty of Science, Department of Pharmaceutical Sciences

R.J.Pieters@uu.nl



Education and Experience

1998-present	Faculty member, full professor since 2010 Utrecht University, the Netherlands
1996-1998	Postdoctoral fellow (with D. B. Janssen) University of Groningen, the Netherlands
1995-1996	Postdoctoral fellow (with F. Diederich) ETH, Zürich, Switzerland
1989-1995	Ph.D. Organic Chemistry (with J. Rebek, Jr.) MIT, Cambridge, MA, USA
1984-1989	M.Sc. Organic Chemistry University of Groningen, the Netherlands

Other functions: Chemical education outreach programme Gambia

Research Keywords: Multivalent carbohydrates, Glycodendrimers, Glyconanoparticles, Carbohydrate microarray, Antimicrobial peptides.

Theme: infection, cancer

Offering: organic chemical synthesis, specializing on the protein-carbohydrate interface

Looking for: biological targets in our themes

Selected Recent Publications:

1. Pieters, R. J. 'Maximising multivalency effects in protein-carbohydrate interactions', *Org. Biomol. Chem.*, **2009**, *7*, 2013-2025.
2. van Scherpenzeel, M.; Moret, E. E.; Ballell, L.; Liskamp, R. M. J.; Nilsson, U. J.; Leffler, H.; Pieters, R. J. 'Synthesis and Evaluation of New Thiodigalactoside-Based Chemical Probes to Label Galectin-3', *ChemBioChem*, **2009**, *10*, 1724-1733.
3. van Scherpenzeel, M.; van den Berg, R. J. B. H. N.; Donker-Koopman, W. E.; Liskamp, R. M. J.; Aerts, J. M. F. G.; Overkleeft, H. S.; Pieters, R. J. 'Nanomolar affinity, iminosugar-based chemical probes for specific labeling of lysosomal glucocerebrosidase', *Bioorg. Med. Chem.* **2010**, *18*, 267-273.
4. Parera Pera, N.; Kouki, A.; Haataja, S.; Branderhorst, H. M.; Liskamp, R. M. J.; Visser, G. M.; Finne, J.; Pieters, R. J. 'Detection of pathogenic *Streptococcus suis* bacteria using magnetic glycoparticles', *Org. Biomol. Chem.*, **2010**, *8*, 2425-2429.
5. Parera Pera, N.; Branderhorst, H. M.; Kooij, R.; Maierhofer, C.; van der Kaaden, M.; Liskamp, R. M. J.; Wittmann, V.; Ruijtenbeek, R.; Pieters, R. J. 'Rapid screening of lectins for multivalency effects with a glycodendrimer microarray', *ChemBioChem*, **2010**, *11*, 1896-1904.

Frank A. Redegeld

Division of Pharmacology, UIPS, Faculty of Science,

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www.uu.nl/medewerkers/FAMRedegeld



Education and Experience

2012 (until 1/7/12)	Visiting Scientist at the Molecular Immunology Section, National Institute of Arthritis and Musculoskeletal and Skin Diseases (PI: Juan Rivera), NIH, USA
2002-present	Associate Professor, Division of Pharmacology, Department of Pharmaceutical Sciences, Faculty of Science, Utrecht University
1997- 2002	Assistant Professor, Department of Pharmacology and Pathophysiology, Faculty of Pharmacy, Utrecht University
1993-1997	Academy Fellow (KNAW) at the Dept. of Pharmacol. & Pathophysiology, Faculty of Pharmacy, Utrecht University
1990-1992	Fogarty Fellow at Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, USA (PI: M.V. Sitkovsky, PhD; lab chief: W.P. Paul, MD).
1984-1989	PhD, Dept. Pharmacology, Fac. Pharmacy, Utrecht University (supervisor; Prof. Dr J. Noordhoek)

Other functions:

Research Keywords: mast cells, allergy, IgE, Ig free light chains, inflammatory diseases, molecular mechanism, signal transduction

Theme: immunology

Offering: extensive knowledge on mast cell biology; primary cultures of mast cells; mast cell models; retroviral transfection of primary cultured cells; knowledge on protein biochemistry

Looking for: tools to identify novel receptor proteins; pharmaceutical targeting free light chains; protein crystallization; imaging techniques; laser microdissection

Selected Recent Publications:

1. Redegeld, F.A., Van der Heijden, M., Kool, M. Heijdra, B.M., Garssen, J., Kraneveld, A.D., Van Loveren, H., Roholl, P., Saito, T., Claassen, J., Verbeek, S.J., Koster, A.S., and Nijkamp, F.P., Ig light chain mediate immediate hypersensitivity-like responses, *Nature Medicine* 8(7), 694-701, 2002
2. Kraneveld, A.D., Kool, M., Van Houwelingen, A.H., Roholl, P., Nijkamp, F.P., and Redegeld, F.A., Immunoglobulin free light chains: Elicitation of 'allergic' asthma without IgE, *Proc. Natl. Acad. Sci USA* 102, 1578-1583, 2005
3. Desmond G Powe, Tom Groot Kormelink, Melanie Sisson, Bart J. Blokhuis, Matthias F Kramer, Nicholas S Jones & Frank A. Redegeld, Evidence for the involvement of free light chain (FLC) immunoglobulins in allergic (IgE) and nonallergic rhinitis, *J. Allergy Clin Immunol.* 125, 139-145, 2010
4. Braber S, Thio M, Blokhuis BR, Henricks PA, Koelink PJ, Groot Kormelink T, Bezemer GF, Kerstjens HA, Postma DS, Garssen J, Kraneveld AD, Redegeld FA, Folkerts G. An Association Between Neutrophils and Immunoglobulin Free Light Chains in the Pathogenesis of COPD. *Am J Respir Crit Care Med.* 185: 793-795, 2012
5. M Thio, T Groot Kormelink, MJ Fischer, BR Blokhuis, FP Nijkamp, FA Redegeld, Antigen Binding Characteristics of Immunoglobulin Free Light Chains: Crosslinking by Antigen is Essential to Induce Allergic Inflammation, *PLoS ONE* 7 (7), e40986, 2012

Fulvio Reggiori

UMC Utrecht, Division DBG, Department of Cell Biology

F.Reggiori@umcutrecht.nl

<http://www.cellbiology-utrecht.nl/groups/reggiori.html>



Education and Experience

2011-present	Associate Professor at the Department of Cell Biology, UMC Utrecht
2005-2011	Assistant Professor at the Department of Cell Biology, UMC Utrecht
2001-2005	Postdoctoral fellow at the Life Sciences Institute, University of Michigan, Ann Arbor, USA (Prof. Daniel Klionsky group)
1998-2001	Postdoctoral fellow at the MRC Laboratory of Molecular Biology, Cambridge, United Kingdom (Dr. Hugh Pelham group)
1994-1998	PhD in biochemistry at the Institute of Biochemistry, University of Fribourg, Switzerland (supervisor Prof. Andreas Conzelmann)

Other functions: Member of the Editorial Board of *Autophagy* and *Microbial Cell* since 2008 and 2013, respectively. Member of the management team at the Cell Microscopy Centre of the UMC Utrecht since 2005

Research Keywords: Autophagy, Cell Biology, Biochemistry, Virology, Immunity
Advanced Imaging techniques, Cell metabolism, Development, Cancer

Theme: Autophagy, Cell Biology, Infection

Offering: live-cell imaging, immuno-electron microscopy and immuno-electron tomography, assays to monitor autophagy, yeast and virology methodologies

Looking for: Proteomics, Structural Biology, protein purifications, in vitro assays, bioinformatics analyses, small molecules

Selected Recent Publications:

1. Boya, P.; **Reggiori, F.***; Codogno, P.; Emerging regulation and functions of autophagy, *Nat Cell Biol*, (2013), 15, 713-720.
*co-corresponding author
2. Rieter, E.; Vinke, F.; Bakula, D.; Cebollero, E.; Ungermann, C.; Proikas-Cezanne, T.; **Reggiori, F.**; Atg18 function in autophagy is regulated by specific sites within its β -propeller, *J Cell Sci*, (2013), 126, 593-604.
3. Cebollero, E.; van der Vaart, A.; Zhao, M.; Rieter, E.; Klionsky, D.J.; J. Helms, B.; **Reggiori, F.**; Phosphatidylinositol-3-phosphate clearance plays a key role in autophagosome completion, *Curr Biol*, (2012), 22, 1545-1553.
4. Nair, U.; Jotwani, A.; Geng, J.; Gammoh, N.; Richerson, D.; Yen, W.-L.; Griffith, J.; Nag, S.; Wang, K.; Moss, T.; Baba, M.; McNew, J.A.; Jiang, X.; **Reggiori, F.***; Melia, T.J.; Klionsky, D.J.; SNARE proteins are required for macroautophagy, *Cell*, (2011), 146, 290-302.
*co-corresponding author
5. **Reggiori, F.***; Monastyrska, I.; Verheije, M.H.; Cali', T.; Ulasli, M.; Bianchi, S.; Bernasconi, R.; de Haan, C.A.M.; Molinari, M.: Coronaviruses hijack LC3-I-positive EDEMosome membranes for replication, *Cell Host Microbe*, (2010), 7, 500-508.
*co-corresponding author

Holger Rehmann

University Medical Center Utrecht, Department of Molecular Cancer Research

h.rehmann@UMC utrecht.nl



Education and Experience

2008-present	Assistant Professor Department of Molecular Cancer Research University Medical Center Utrecht
2003-2008	Postdoctoral Fellow Department of Physiological Chemistry University Medical Center Utrecht
1999-2003	PhD, Structural Biology <i>Max-Planck-Institut für Molekulare Physiologie</i> Dortmund, Germany
1994-1999	<i>Diplom-Biochemiker</i> , Biochemistry <i>Ruhr-Universität Bochum</i> Bochum, Germany

Other functions:

Research Keywords: biophysics, x-ray crystallography, regulated conformational states of proteins, protein-protein interaction, protein-ligand interaction, signal-transduction

Theme: cancer

Offering: biophysical characterization of protein-protein and protein-ligand interactions

Looking for: regulation processes on protein level

Selected Recent Publications:

1. Gloerich, M., Vliem, M.J., Prummel, E., Meijer, L.A., Rensen, M.G., Rehmann, H. and Bos, J.L. (2011) The nucleoporin RanBP2 tethers the cAMP effector Epac1 and inhibits its catalytic activity. *J. Cell Biol.* **193**, 1009-1020.
2. Rehmann, H., Arias-Palomo, E., Hadders, M. A., Schwede, F., Llorca, O., and Bos, J. L. (2008) Structure of Epac2 in complex with a cyclic AMP analogue and RAP1B. *Nature* **455**, 124-127
3. Vliem, M. J., Ponsioen, B., Schwede, F., Pannekoek, W. J., Riedl, J., Kooistra, M. R., Jalink, K., Genieser, H. G., Bos, J. L., and Rehmann, H. 8-pCPT-2'-O-Me-cAMP-AM: an improved Epac-selective cAMP analogue. (2008) *Chembiochem.* **9**, 2052-2054
4. Rehmann, H., Das J., Knipscheer, P., Wittinghofer A., and Bos, J.L. (2006) Structure of the cAMP responsive exchange factor Epac2 in its auto-inhibited state *Nature* **439**, 625-628
5. Rehmann, H., Prakash, B., Wolf, E., Rueppel, A., de Rooij, J., Bos, J.L., & Wittinghofer, A. (2003) Structure and regulation of the cAMP-binding domains of Epac2. *Nat Struct Biol*, **10**, 26-32.

Dirk T.S. Rijkers

Medicinal Chemistry and Chemical Biology, Faculty of Science, Department of Pharmaceutical Sciences

D.T.S.Rijkers@uu.nl



Education and Experience

2000-present	Assistant professor of Medicinal Chemistry and Chemical Biology
2008-2009	Visiting professor at the ETH Zürich in the group of prof. F. Diederich
1997-2000	Post-doc with prof. R.M.J. Liskamp (Utrecht University)
1994-1997	Post-doc with prof. H.C. Hemker (Maastricht University)
1990-1994	Ph.D. with prof. G.I. Tesser (Nijmegen University)
1985-1990	B.Sc. Chemical Engineering/Bioorganic Chemistry (Eindhoven University of Technology)

Other functions: Dutch representative of the European Peptide Society council

Research Keywords: Peptides and peptidomimetics, Peptide synthesis methodology, Peptide-based therapeutics

Theme: neuroscience, infection, cancer

Offering: organic synthesis, peptide synthesis

Looking for: biological targets in our themes

Selected Recent Publications:

1. D.T.S. Rijkers: 'Synthesis of cyclic peptides and peptidomimetics by metathesis reactions'. *Top. Heterocycl. Chem.* **2015**, DOI: 10.1007/7081_2015_142.
2. J.C. Slootweg, N. Peters, H.C. Quarles van Ufford, E. Breukink, R.M.J. Liskamp, D.T.S. Rijkers: 'Semi-synthesis of biologically active nisin hybrids composed of the native lanthionine ABC-fragment and a cross-stapled synthetic DE-fragment.' *Bioorg. Med. Chem.* **2014**, *22*, 5345-5353.
3. J.C. Slootweg, S. van der Wal, H.C. Quarles van Ufford, E. Breukink, R.M.J. Liskamp, D.T.S. Rijkers: 'Synthesis and antimicrobial activity, and membrane permeabilizing properties of C-terminally modified nisin conjugates accessed by CuAAC'. *Bioconjugate Chem.* **2013**, *24*, 2058-2066.
4. J. Zhang, J. Kemmink, D.T.S. Rijkers, R.M.J. Liskamp: 'Synthesis of 1,5-triazole bridged vancomycin CDE-ring bicyclic mimics using RuAAC macrocyclization'. *Chem. Commun.* **2013**, *49*, 4498-4500.
5. R.M.J. Liskamp, D.T.S. Rijkers, J.A.W. Kruijtzter, J. Kemmink: 'Peptides and proteins as a continuing exciting source of inspiration for peptidomimetics'. *ChemBioChem* **2011**, *12*, 1626-1653.
6. C.-B. Yim, B. van der Wildt, I. Dijkgraaf, L. Joosten, A. Eek, C. Versluis, D.T.S. Rijkers, O.C. Boerman, R.M.J. Liskamp: 'Spacer effects on in vivo properties of DOTA-conjugated dimeric [Tyr³]octreotate peptides synthesized by a 'Cu(I)-click' and 'sulfo-click' ligation method'. *ChemBioChem* **2011**, *12*, 750-760.

Rob Ruijtenbeek

Medicinal Chemistry and Chemical Biology, Faculty of Science, Department of Pharmaceutical Sciences

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Education and Experience

2004-present	Vice President Biological Sciences, Head of R&D, PamGene Int. B.V. Guest researcher, Dept. Medicinal Chemistry and Chemical Biology, Utrecht University
2001-2004	Senior Scientist and group leader, PamGene Int. B.V., 's-Hertogenbosch
2001	PhD degree, Dept of Medicinal Chemistry + dept. of Pharmacology & Pathophysiology, Utrecht University
1996	Master of Science degree in both biochemistry and organic chemistry, Radboud University Nijmegen

Other functions: head of R&D Pamgene

Research Keywords: Peptide microarrays, kinase, signal transduction, oncology, targeted therapies

Theme: infection, cancer, neurosciences

Offering: dynamical proteomics arrays

Looking for: screening libraries

Selected Recent Publications:

1. Arja ter Elst, Sander H. Diks, Kim R. Kampen, Peter M. Hoogerbrugge, Rob Ruijtenbeek, Piet J. Boender, Arend H. Sikkema, Frank J. G. Scherpen, Willem A. Kamps, Maikel P. Peppelenbosch, Eveline S. J. M. de Bont, Identification of new possible targets for leukemia treatment by kinase activity profiling, *Leuk Lymphoma*. **2011** Jan;52(1):122-30
2. Jeroen van Ameijde, Alex J. Poot, Loek T. M. van Wandelen, Angelique E. M. Wammes, Rob Ruijtenbeek, Dirk T. S. Rijkers and Rob M. J. Liskamp. Preparation of novel alkylated arginine derivatives suitable for click-cycloaddition chemistry and their incorporation into pseudosubstrate- and bisubstrate-based kinase inhibitors, *Org Biomol Chem*. (**2010**) Apr 7;8(7):1629-39
3. Sigurd Folkvord, Kjersti Flatmark, Svein Dueland, Rik de Wijn, Krystyna Kotanska Grøholt, Jahn M. Nesland, Knut H. Hole, Piet J. Boender, Rob Ruijtenbeek, Marianne Johansen, Karl-Erik Giercksky, and Anne Hansen Ree, Prediction of Response to Preoperative Chemoradiotherapy in Rectal Cancer by Multiplex Kinase Activity Profiling, *Int J Radiat Oncol Biol Phys*. **2010** Oct 1;78(2):555-62
4. Alex J. Poot, Jeroen van Ameijde, Rob Ruijtenbeek, Riet Hilhorst, Monique Slijper, Dirk TS Rijkers, Rob MJ Liskamp, Substrate profiling of protein kinase C isoforms using Serine/Threonine peptide microarrays, *ChemBioChem*, **2009** Aug 17;10(12):2042-51
5. Hilhorst R, Houkes L, van den Berg A, Ruijtenbeek R. Peptide microarrays for detailed, high-throughput substrate identification, kinetic characterisation and inhibition studies on Protein Kinase A. *Anal Biochem*. **2009** Apr 15;387(2):150-61

Elisabeth (Lieke) A.M. Sanders

Immunology and Infectious Diseases, Department of Pediatrics, University
Medical center UtrechtGroup
l.sanders@umcutrecht.nl

**Education and Experience**

2003-present	Full professor in Pediatric Immunology and Infectious Diseases, Manager Research and Education, Division of Pediatrics UMCU (2009)
2004-2009	Head of clinical department Pediatric Immunology and Infectious Diseases
2000-2003	UHD, Pediatric Immunology
1993-2000	UD, Pediatric Immunology
1990-1993	Research-fellow Laboratory Department Paediatric Immunology, PhD thesis
1989-	Pediatrician

Other functions: leader research group Prevention of Respiratory Infections

Research Keywords: Respiratory infections, otitis media, vaccination, immunology, microbiome

Theme: immunology, infection, public health, prevention

Offering: experience in large clinical trials, expertise in microbiology and microbiology

Selected Recent Publications:

1. Gils, EJM van, Veenhoven, RH, Hak, E, Rodenburg, GD, Bogaert, D, IJzerman, EPF, Alphen, L, Sanders, EAM.(2009). Effect of reduced-dose schedules with 7-valent pneumococcal conjugate vaccine on nasopharyngeal pneumococcal carriage in children: a randomized controlled trial. JAMA. 2009 Jul 8;302(2):159-67.
2. Gils EJM van, Veenhoven RH, Hak E, Rodenburg GD, Keijzers WCM, Bogaert D, Trzcinski K, Bruin JP, van Alphen L, Sanders EA.(2010) Pneumococcal Conjugate Vaccination and nasopharyngeal Acquisition of Pneumococcal Serotype 19A Strains. JAMA. 2010 Sep 8;304(10):1099-106.
3. Rozenbaum MH, Sanders EA, van Hoek AJ, Jansen AG, van der Ende A, van den Dobbelsteen G, Rodenburg GD, Hak E, Postma MJ. Cost effectiveness of pneumococcal vaccination among Dutch infants: economic analysis of the seven valent pneumococcal conjugated vaccine and forecast for the 10 valent and 13 valent vaccines. BMJ. 2010 Jun 2;340:c2509
4. Bogaert D, Keijser B, Huse S, Rossen J, Veenhoven R, van Gils E, Bruin J, Montijn R, Bonten M, Sanders E. Variability and diversity of nasopharyngeal microbiota in children: a metagenomic analysis. PLoS One. 2011 Feb 28;6(2):e17035.

Guus Scheefhals

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Website: www.crossbeta.com

**Education and Experience**

Guus Scheefhals (1960) was appointed Chief Executive Officer of Crossbeta Biosciences in April, 2010. Previously, he worked for six years at Avantium in several managerial positions. Prior to that, he gained vast experience in the pharmaceutical industry in several commercial positions. He was Business Development Manager at DSM Biologics worked at the Product Partnering Division of Fresenius. Guus holds a Master's Degree in Pharmacy from the Utrecht University in The Netherlands.

Other functions:**Research Keywords:**

Theme: neuroscience

Offering: stable oligomers and screening assays for misfolded protein diseases

Looking for: small molecules, protein expression and purification, protein characterization techniques, cell assays for CNS compound evaluation

Selected Recent Publications:

Raymond M. Schiffelers

Laboratory Clinical Chemistry & Hematology, UMCU

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<http://www.umcutrecht.nl/subsite/dcch/Research/extracellular-vesicles.htm>



Education and Experience

2011-present	Associate professor in Nanomedicine (UMCU, Clinical Chemistry & Hematology)
2004-2011	Assistant (<2007) - Associate professor in Pharmaceutics (UU, Pharmaceutics)
2001-2004	Postdoc siRNA delivery in cancer (UU, Pharmaceutics) within this project in 2002-2003 research at Intradigm Co. (Washington DC) in collaboration with University of Maryland (Baltimore) and University of Tennessee (Knoxville)
1996-2001	PhD Medical Microbiology, Erasmus University Rotterdam (supervisors Dr. I.A.J.M. Bakker-Woudenberg, Prof. Dr. G. Storm and Prof. Dr. H.A. Verbrugh)
1994-1995	Industrial Traineeship, SmithKline&Beecham Pharmaceuticals (Welwyn, UK)

Other functions: Editor of the Journal of Extracellular Vesicles, Pharmaceutical Research, NanoLife, NanoMED, member of the International Society for Extracellular Vesicles

Research Keywords: Extracellular vesicles, liposomes, drug delivery systems, non-coding RNA

Theme: immunology, infection, cancer

Offering: Nanoparticle analysis, liposomal (model) systems, drug delivery expertise, in vivo models

Looking for: Clinical translation of experimental extracellular vesicle work both for diagnostic and therapeutic applications/New tools to study extracellular vesicles

Selected Recent Publications:

1. Vader, P., Fens, M.H.A.M., Sachini, N., van Oirschot, B., Andringa, G., Egberts, A.C.G., Gaillard, C.A.J.M., Rasmussen, J.T., van Wijk, R., van Solinge, W.W., and Schiffelers, R.M. Taxol-induced phosphatidylserine exposure and microvesicle formation in red blood cells is mediated by its vehicle Cremophore EL. *Nanomedicine* 2013 (in press)
2. De Vooght, K.M.K., Lau, C., de Laat, P.P.M., van Wijk, R., van Solinge, W.W., and Schiffelers, R.M. Extracellular vesicles in the circulation: are erythrocyte microvesicles a confounder in the plasma hemoglobin assay? *Biochemical Society Transactions* 2013 41: 288-292
3. van der Meel R, Oliveira S, Altintas I, Haselberg R, van der Veecken J, Roovers RC, van Bergen en Henegouwen PM, Storm G, Hennink WE, Schiffelers RM, Kok RJ. Tumor-targeted Nanobullets: Anti-EGFR nanobody-liposomes loaded with anti-IGF-1R kinase inhibitor for cancer treatment. *J Control Release*. 2012 159:281-9.
4. Kooijmans SA, Vader P, van Dommelen SM, van Solinge WW, Schiffelers RM. Exosome mimetics: a novel class of drug delivery systems. *Int J Nanomedicine*. 2012 7:1525-41.
5. Coimbra M, Rijcken CJ, Stigter M, Hennink WE, Storm G, Schiffelers RM. Antitumor efficacy of dexamethasone-loaded core-crosslinked polymeric micelles. *J Control Release*. 2012 163(3):361-7.

Anne G.M. Schilder

Pediatric Otorhinolaryngology / Respiratory Infections, Group, UMC Utrecht,
Department of Otorhinolaryngology - Head and Neck Surgery, Division of Surgical
Specialties

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Education and Experience

2009-present	Professor in Pediatric Otorhinolaryngology, University Utrecht
1999-present	Head Pediatric Otorhinolaryngology, Wilhelmina Children's Hospital Hospital, UMC Utrecht
1995	Epidemiologist
1991	Research Fellow MRC Institute of Hearing Research, Nottingham, UK
1989- 1995	PhD and Specialist Trainee in Otorhinolaryngology, UMC St Radboud Nijmegen

Other functions: Director ENT Clinical Trials Programme, University College London, UK; Chairman ENT Specialty Group, NIHR Comprehensive Clinical Research Network, UK; Co-ordinating Editor ENT Group, Cochrane Collaboration UK; President-elect European Society of Pediatric Otorhinolaryngology

Research Keywords: upper respiratory tract infections, otitis media, clinical trials, epidemiology, etiology

Theme: Respiratory Infections, Child Health

Offering: Clinical trials expertise, Clinical sampling

Selected Recent Publications:

1. van den Aardweg MTA, Boonacker CWB, Rovers MM, Hoes AW, Schilder AGM. Effectiveness of adenoidectomy in children with recurrent upper respiratory tract infections: open randomised controlled trial. *BMJ* **2011**; Sep 6;343:d5154. doi: 10.1136/bmj
2. Bezáková N, Damoiseaux RAMJ, Hoes AW, Schilder AGM, Rovers MM. Recurrence up to 3.5 years after antibiotic treatment of acute otitis media in very young Dutch children: a survey of trial participants. *BMJ* **2009** Jun 30;338
3. van der Veen EL, Rovers MM, Albers FWJ, Sanders EAM, Schilder AGM. Effectiveness of trimethoprim-sulfamethoxazole in children with chronic active otitis media: a randomized placebo controlled trial. *Pediatrics* **2007**, 119(5):897-904
4. Brouwer CNM, Maillé AR, Rovers MM, Veenhoven RH, Grobbee DE, Sanders EAM, Schilder AGM. Effect of pneumococcal vaccination on quality of life in children with recurrent acute otitis media: a randomized controlled trial. *Pediatrics* **2005**; 115: 273-9
5. Staij van BK, Akker van den EH, Rovers MM, Hordijk GJ, Hoes AW, Schilder AGM. Effectiveness of adenotonsillectomy in children with mild symptoms of throat infections or adenotonsillar hypertrophy: open, randomised controlled trial. *BMJ* **2004**;329(7467):651-4

Peter van der Sluijs

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Education and Experience

- | | |
|--------------|--|
| 1998-present | Associate Professor of Cell Biology, UMC Utrecht. |
| 1993-1998 | KNAW investigator, Department of Cell Biology, UU. |
| 1989-1993 | Post-doc, Department of Cell Biology (Prof. Dr. I. Mellman), Yale Medical School, New Haven, USA. |
| 1987-1989 | Post-doc, European Molecular Biology Laboratory, (Dr. T. Kreis), Heidelberg, FRG. |
| 1984-1987 | Graduate student, Department of Pharmacology and Therapeutics, (Prof. Dr. D.K.F. Meijer), University of Groningen. |

Research Keywords: cell polarity, membrane traffic, small GTPases, degranulation, secretory lysosomes, recycling endosomes, reconstitution of membrane transport,

Theme: immunology, neuroscience, cancer

Offering: metazoan cell biology methods, viral expression systems, live cell imaging, single cell biochemistry protein assays

Looking for: human disease models for impaired intra- and intercellular communication

Selected Recent Publications:

1. Elstak ED, Neeft M, Nehme NT, Voortman J, Cheung M, Goodarzi M, Gerritsen HC, van Bergen en Henegouwen PMP, Callebaut, I, de Saint Basile G, van der Sluijs P. 2011. Munc13-4 rab27 complex is specifically required for tethering secretory lysosomes at the plasma membrane. *Blood*. 118: 1570-1578.
2. Grigoriev I*, Yu KL*, Martinez-Sanchez E*, Serra Marques AA, Keijzer N, Demmers J, Peränen J, Pasterkamp RJ, van der Sluijs P, Hoogenraad CC, and Akhmanova A. 2011. Rab6 and Rab8 cooperate in controlling docking and fusion of exocytotic carriers. *Curr. Biol*. 21: 967-974 (*equal contributions).
3. Hoogenraad CC, Popa I, Futai K, Sanchez-Martinez E, Wulf PS, van Vlijmen T, Dortland BR, Oorschot V, Govers R, Monti M, Heck AJR, Sheng M, Klumperman J, Rehmann H, Jaarsma D, Kapitein LC, and van der Sluijs P. 2010. Neuron specific Rab4 effector GRASP-1 coordinates membrane specialization and maturation of recycling endosomes. *PLoS Biol*. 8: e1000283.
4. van Vlijmen* T, Rojas* R, Mardones G, Mohammed S, Heck AJR, Raposo G, van der Sluijs P and Bonifacino JS. 2008. Regulation of retromer recruitment to endosomes by sequential action of rab5 and rab7. (*equal contributions). *J. Cell Biol*.183: 513-526.
5. Kamsteeg EJ, Hendriks G, Konings IBM, Oorschot V, van der Sluijs P, Klumperman J, and Deen PMT. 2006. Short-chain ubiquitination mediates the regulated endocytosis of the aquaporin-2 water channel. *Proc. Natl. Acad. Sci. USA*. 103, 18344-18349.

Nina M. van Sorge

Bacterial Glycobiology, UMC Utrecht, Medical Microbiology

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Education and Experience

2014-present	Associate professor, Department of Medical Microbiology, UMC Utrecht
2012- 2014	Assistant professor, Department of Medical Microbiology, UMC Utrecht
2007-2011	Postdoc, Department of Pediatrics, University of California San Diego (UCSD), La Jolla, CA, USA (with Prof. Victor Nizet and Prof. Kelly Doran)
2006-2007	Post-doc, Department of Infectious Diseases and Immunology, Utrecht University (with Prof. J. van Putten)
2005-2006	Visiting Scientist, Centenary Institute, Sydney, Australia (With. Dr. S. Tangye)
2001-2005	PhD, Departments of Immunology and Neurology, UMC Utrecht (with Prof. J. van de Winkel and Prof. J. Wokke)

Other functions: Head of research group 'Bacterial Glycobiology'

Editorial Board Member for Nature Scientific Reports and Frontiers in Microbiology

Secretary of section group 'General and Molecular Microbiology' of Royal Dutch Society for Microbiology (KNVM).

Research Keywords: Gram-positive bacteria, cell wall polysaccharides, virulence, vaccine, antibiotics, C-type lectin receptors

Theme: immunology, infection

Offering: Bacterial glycobiology (linking structure to function), bacterial mutagenesis, host-pathogen interaction, vaccine development

Looking for: complex carbohydrate analysis and synthesis

Selected Recent Publications:

1. S.L. van der Beek, Y. Le Breton, A.T. Ferenbach, R.N. Chapman, D.M.F. van Aalten, I. Navratilova, G-J. Boons, K. McIver, **N.M. van Sorge**[#], H.C. Dorfmueller. GacA is essential for Group A *Streptococcus* and defines a new class of monomeric dTDP-4-dehydrohamnose reductases (RmID) *Mol Microbiol.* **2015** Aug 17, *epub ahead of print* [
2. **N.M. van Sorge**^{*}, [#], J. N. Cole^{*}, K. Kuipers, R. K. Aziz,..., and V. Nizet. The classical Lancefield antigen of Group A *Streptococcus* is a virulence determinant with implications for vaccine design. *Cell Host Microbe.* **2014**; 15 (6): 729-40.
3. **N.M. van Sorge**, F.C. Beasley,..., and V. Nizet. Methicillin-resistant *Staphylococcus aureus* bacterial nitric oxide synthase affects antibiotic sensitivity and skin abscess development. *J Biol Chem.* **2013**; 288 (9): 6417-6426.
4. J.N. Cole, R.K. Aziz, K. Kuipers, A.T. Timmer, V. Nizet, **N.M. van Sorge**[#]. A conserved UDP-glucose dehydrogenase outside the hasABC operon contributes to capsule biogenesis in Group A *Streptococcus*. *J Bacteriol.* 2012; 194 (22): 6154-61.
5. A. Guichard, **N.M. van Sorge**^{*}, S.M. McGillivray^{*}, B. Cruz Moreno^{*}, V. Nizet, E. Bier. Anthrax toxins cooperatively inhibit endocytic recycling by the Rab11/Sec15 exocyst. *Nature.* **2010**: 7317; 854-858.

Willem Stoorvogel

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Education and Experience

- | | |
|---------------|---|
| 2004-present: | Full professor, Dept Biochemistry and Cell Biology. Fac Vet Med. |
| 1990-2003: | Post-doc (-1997) and associate professor (1997-) at Cell Biology, UMCU, Utrecht |
| 1988-1990: | Post-doc (with prof Alan Schwartz) at Washington Univ, USA |
| 1983-1988: | Ph.D. at Cell Biology, fac of Medicine, Utrecht |

Other functions: program coordinator "biology of reproductive cells"

Research Keywords: MHC class II, antigen presentation, dendritic cells, exosomes

Theme: immunology, development, cancer

Offering: cell biological and immunological assays

Looking for: biological targets in immunity

Selected Recent Publications:

1. van Niel G, Wubbolts R, Ten Broeke T, Buschow SI, Ossendorp FA, Melief CJ, Raposo G, van Balkom BW, Stoorvogel W. Dendritic cells regulate exposure of MHC class II at their plasma membrane by oligoubiquitination. *Immunity*. 2006 25(6):885-94.
2. Nolte-'t Hoen EN, Buschow SI, Anderton SM, Stoorvogel W, Wauben MH. Activated T cells recruit exosomes secreted by dendritic cells via LFA-1. *Blood*. 2009 113(9):1977-81.
3. Buschow SI, Nolte-'t Hoen EN, van Niel G, Pols MS, ten Broeke T, Lauwen M, Ossendorp F, Melief CJ, Raposo G, Wubbolts R, Wauben MH, Stoorvogel W. MHC II in dendritic cells is targeted to lysosomes or T cell-induced exosomes via distinct multivesicular body pathways. *Traffic*. 2009 10(10):1528-42.
4. ten Broeke T, de Graaff A, van't Veld EM, Wauben MH, Stoorvogel W, Wubbolts R. Trafficking of MHC class II in dendritic cells is dependent on but not regulated by degradation of its associated invariant chain. *Traffic*. 2010 (3):324-31.
5. ten Broeke T, van Niel G, Wauben MH, Wubbolts R, Stoorvogel W. Endosomally stored MHC class II does not contribute to antigen presentation by dendritic cells at inflammatory conditions. *Traffic*. 2011 12(8):1025-36.

Jan P.M. Tommassen

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Education and Experience

2001-present	Professor in Prokaryotic Microbiology, Department of Biology, Utrecht University
1984-2001	Assistant/associate professor, Department of Molecular Cell Biology, Utrecht University
1982-1983	Post-doc with Dr. Ben Lugtenberg, Dept. of Molecular Cell Biology, Utrecht University
1978-1982	Ph.D. in Microbiology at Utrecht University (with Dr. Ben Lugtenberg)

Other functions:

Research Keywords: Gram-negative bacteria, outer membrane, outer membrane proteins, lipopolysaccharide, endotoxin, membrane biogenesis, transport processes, vaccines

Theme: Infection

Offering: Biological targets

Looking for: Inhibitors

Selected Recent Publications:

1. Voulhoux, R., Bos, M.P., Geurtsen, J., Mols, M., and Tommassen, J. 2003. Role of a highly conserved bacterial protein in outer membrane protein assembly. *Science* **299**:262-265.
2. Bos M.P., Tefsen, B., Geurtsen, J., and Tommassen, J.. 2004. Identification of an outer membrane protein required for the transport of lipopolysaccharide to the bacterial cell surface. *Proc. Natl. Acad. Sci. USA* **101**:9417-9422.
3. Rutten, L., Geurtsen, J., Lambert, W., Smolenaers, J.J.M., Bonvin, A.M., de Haan, A., van der Ley, P., Egmond, M.R., Gros, P., and Tommassen, J. 2006. Crystal structure and catalytic mechanism of the LPS 3-O-deacylase PagL from *Pseudomonas aeruginosa*. *Proc. Natl. Acad. Sci. USA* **103**:7071-7076.
4. Robert, V., Volokhina, E.B., Senf, F., Bos, M.P., Van Gelder, P., and Tommassen, J. 2006. Assembly factor Omp85 recognizes its outer membrane protein substrates by a species-specific C-terminal motif. *PLoS Biol.* **4**:1984-1995.
5. Stork, M., Bos, M.P., Jongerius, I., de Kok, N., Schilders, I., Weynants, V.E., Poolman, J.T., and Tommassen, J. 2010. An outer membrane receptor of *Neisseria meningitidis* involved in zinc acquisition with vaccine potential. *PLoS Pathogens* **6**:e1000969.

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Education and Experience

- | | |
|--------------|--|
| 2014-present | Associate Professor, Department of Pharmaceutics, Utrecht University
NWO-Vidi-Laureate (2014) |
| 2009-2014 | Assistant Professor
Department of Pharmaceutics, Utrecht University |
| 2005-2009 | Postdoc (with prof. W.E. Hennink),
Utrecht University |
| 2008 | Postdoctoral Associate (with prof. R.A. Siegel), University of Minnesota, USA |
| 2000-2005 | Ph.D. Physical/Organic Chemistry (with prof. E.J.R. Sudhölter), Wageningen University |

Other functions: Guest editor European Polymer Journal 2015

Research Keywords: Biomaterials, drug/protein delivery, 3D printing, regenerative medicine

Theme: stem cells and development

Offering: polymer synthesis and characterization, protein/drug delivery, specializing in hydrogels

Looking for: targets for regenerative medicine

Selected Recent Publications:

1. K.M.W. Boere, M.M. Blokzijl, J. Visser, E.A. Linssen, J. Malda, W.E. Hennink, T. Vermonden, Biofabrication of reinforced 3D-scaffolds using two-component hydrogels. *Journal of Materials Chemistry B*, 3, 9067-7078, (2015)
2. T. Vermonden, B. Klumperman, The past, present and future of hydrogels. *European Polymer Journal* **72**, 341-343, (2015)
3. K.W.M. Boere, J. van den Dikkenberg, Y. Gao, J. Visser, W.E. Hennink, T. Vermonden, Thermogelling and Chemoselectively Cross-Linked Hydrogels with Controlled Mechanical Properties and Degradation Behavior *Biomacromolecules* **16**, 2840-2851, (2015)
4. D. Li, N. Kordalivand, M.F. Fransen, F. Ossendorp, K. Raemdonck, T. Vermonden, W. E. Hennink, C.F. van Nostrum, Reduction-Sensitive Dextran Nanogels Aimed for Intracellular Delivery of Antigens. *Advanced Functional Materials* **25**, 2993-3003 (2015)
5. K.W.M. Boere, B.G. Soliman, D.T.S. Rijkers, W.E. Hennink, T. Vermonden, Thermoresponsive Injectable Hydrogels Cross-Linked by Native Chemical Ligation, *Macromolecules* **47**, 2430-2438 (2014).

Robert GJ Vries

Clevers Group, Hubrecht Institute.

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**Education and Experience**

2011-Current	Project management/Business development Hubrecht Institute, Utrecht.
2007-2011	Post Doc, Hubrecht Institute, Utrecht
2004-2007	Post Doctoral fellow, Howard Hugh Medical Institute, Stanford University, USA.
2003-2004	Post Doc, Molecular and Cellular Biology, Leiden University Medical Center.
1997-2003	PhD, Molecular and Cellular Biology, Leiden University Medical Center.

Other functions: Patent management

Research Keywords:

Theme: Adult Stem Cells, Development, Cancer, Wnt Signaling, Intestine

Offering: Human and mouse 3D stem cell/ organoid culture

Looking for:

Selected Recent Publications:

- 1) Long-term expansion of epithelial organoids from human colon, adenoma, adenocarcinoma, and Barrett's epithelium. Sato T, Stange DE, Ferrante M, **Vries RG**, Van Es JH, Van den Brink S, Van Houdt WJ, Pronk A, Van Gorp J, Siersema PD, Clevers H. *Gastroenterology*. 2011 Nov;141(5):1762-72.
- 2) 2 Paneth cells constitute the niche for Lgr5 stem cells in intestinal crypts. Sato T, van Es JH, Snippert HJ, Stange DE, **Vries RG**, van den Born M, Barker N, Shroyer NF, van de Wetering M, Clevers H. *Nature*. 2011 Jan 20; 469(7330): 415-8.
- 3) Single Lgr5 stem cells build crypt-villus structures in vitro without a mesenchymal niche. Sato T, **Vries RG**, Snippert HJ, van de Wetering M, Barker N, Stange DE, van Es JH, Abo A, Kujala P, Peters PJ, Clevers H. *Nature*. 2009 May 14;459(7244):262-5.
- 4) Cancer-associated mutations in chromatin remodeler hSNF5 promote chromosomal instability by compromising the mitotic checkpoint. **Vries RG**, Bezrookove V, Zuijderduijn LM, Kia SK, Houweling A, Oruetebarria I, Raap AK, Verrijzer CP. *Genes Dev*. 2005 Mar 15;19(6):665-70.
- 5) A specific lysine in c-Jun is required for transcriptional repression by E1A and is acetylated by p300. **Vries RG**, Prudenziati M, Zwartjes C, Verlaan M, Kalkhoven E, Zantema A. *EMBO J*. 2001 Nov 1;20(21):6095-103.

Linette E.M. Willemsen

Pharmacology, Faculty of Science, Department of Pharmaceutical Sciences

l.e.m.willemsen@uu.nl**Education and Experience**

- | | |
|--------------|---|
| 2005-present | Assistant professor, Department of Pharmaceutical Sciences, University of Utrecht |
| 1998-2005 | Scientific Researcher Numico Research B.V. (Danone), Wageningen; in 2004 PhD degree, Faculty of Medicine (promoter Prof. dr. S. van Deventer), University of Amsterdam |
| 1996-1998 | Researcher at the Department of Cell Biology and Histology (employed by Nichols Institute Diagnostics), and Assistant Board Committee Biomedical Health Sciences, both at Radboud University Nijmegen |
| 1990-1996 | MSc Biomedical Health Sciences, Toxicology, Radboud University Nijmegen |

Research Keywords: food allergy, mucosal immunology, non-digestible oligosaccharides, poly-unsaturated fatty acids, intestinal epithelium, regulatory T-cell, dendritic cell, galectin

Theme: Food allergy, mucosal immunology, dietary intervention

Offering: *In vivo* and *in vitro* models to study mechanisms underlying prevention and/or treatment of allergic sensitization using intervention with specific dietary components. Non-digestible oligosaccharides and n-3 polyunsaturated fatty acids are dietary components that effectively prevent food allergic symptoms in a mouse model for cow's milk allergy. Mechanisms involve the induction of regulatory T-cells. Intestinal epithelial cells may play a pivotal role in mucosal immune modulation via dietary components and their function is studied in an *in vitro* coculture model of human intestinal epithelial cells and mixed lymphocytes or dendritic cells. Using this coculture model we identified toll like receptor ligands and non-digestible oligosaccharides to be capable of enhancing regulatory T-cell numbers via induction of epithelial derived galectins.

Looking for: combination therapy aiming to combine specific dietary components and pharma in prevention or treatment of allergic disease

Selected Recent Publications:

1. de Kivit S, Saeland E, Kraneveld AD, van de Kant HJ, Schouten B, van Esch BC, Knol J, Sprikkelman AB, van der Aa LB, Knippels LM, Garssen J, van Kooyk Y, Willemsen LE. Galectin-9 induced by dietary synbiotics is involved in suppression of allergic symptoms in mice and humans. *Allergy* **2012**, online.
2. Schouten B, van Esch BC, Hofman GA, de Kivit S, Boon L, Knippels LM, Garssen J, Willemsen LE. A potential role for CD25+ regulatory T-cells in the protection against casein allergy by dietary non-digestible carbohydrates. *Br J Nutr* **2012**;107:96-105.
3. de Kivit S, van Hoffen E, Korthagen N, Garssen J, Willemsen LE. Apical TLR ligation of intestinal epithelial cells drives a Th1-polarized regulatory or inflammatory type effector response *in vitro*. *Immunobiology* **2011**;216:518-27.
4. Schouten B, van Esch BC, van Thuijl AO, Blokhuis BR, Groot Kormelink T, Hofman GA, Moro GE, Boehm G, Arslanoglu S, Sprikkelman AB, Willemsen LE, Knippels LM, Redegeld FA, Garssen J. Contribution of IgE and immunoglobulin free light chain in the allergic reaction to cow's milk proteins. *J Allergy Clin Immunol* **2010**;125:1308-14.
5. Schouten B, van Esch BC, Hofman GA, van Doorn SA, Knol J, Nauta AJ, Garssen J, Willemsen LE, Knippels LM. Cow milk allergy symptoms are reduced in mice fed dietary synbiotics during oral sensitization with whey. *J Nutr* **2009**;139:1398-403.

Adabella van der Zand

Cellular Protein Chemistry, Faculty of Science, Department of Chemistry
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Website: currently no web presence



Education and Experience

- | | |
|--------------|--|
| 2012-present | Assistant professor in Cellular Protein Chemistry, Department of Chemistry, Utrecht University |
| 2004-2012 | Post-doc in the groups of I. Braakman and H. Tabak, Cellular Protein Chemistry, Utrecht University |
| 2009-2010 | Guest Postdoc in the group of F. Reggiori, Cellular Microscopy Center, UMC Utrecht |
| 2001-2004 | PhD in Molecular Biology, University of Manchester (supervisors Prof. C.J. Stirling and Prof. S. High) |

Research Keywords: organelle biogenesis, organelle size, membrane proteins, fluorescence microscopy, yeast genetics

Theme: neuroscience, cancer

Offering: in vivo protein-protein interactions (split-GFP), yeast as a model organism, live-cell fluorescence microscopy

Looking for: mass-spectrometry, protein purification, electron microscopy

Selected Recent Publications:

1. Tabak, H.F., Braakman, I., Van der Zand, A. (2013). Peroxisome formation and maintenance are dependent on the endoplasmic reticulum. *Annu. Rev. Biochem.* (in press)
2. Van der Zand, A., Gent, J., Braakman, I. and Tabak, H.F. (2012). Biochemically distinct vesicles from the endoplasmic reticulum fuse to form Peroxisomes. *Cell*, 149, 397-409.
3. Van der Zand, A., Braakman, I. and Tabak, H.F. (2010). Peroxisomal membrane proteins insert into the endoplasmic reticulum. *Mol. Biol. Cell* 21, 2057-2065.