

# UIPS Highlights

28 October 2016 - 26 October 2018



**UIPS** Utrecht Institute for  
Pharmaceutical Sciences





With pleasure we provide here some of the research highlights of our UIPS institute, selecting those that were recently featured on the UU news feed. Although we are proud of these highlights there are certainly more, and we should continuously put effort and time into ensuring that colleagues and the society at large become aware of our research and its impact. Allow us to focus on a few of these highlights:

Our very active Future Medicines Fellows have organized seminars and even a summer school. We hope to continue this program and appoint new Future Medicines Fellows.

Seven tenure trackers, from a very diverse background, are now strengthening our research institute, and they organize the DWDD colloquia. Two new professors were attracted to our institute, made already quite some impact, and hopefully there are more to come.

The international peer research review of 2017 led to the best evaluation in our 26 year history. Let us aim to retain this level of scientific excellence.

We like to keep stressing that in our view quality and impact are key; not quantity.

The impact of research in Pharmaceutical Sciences benefits from collaboration. At a local level for instance within Science for Life, the hubs of the Utrecht Life Sciences, the UMCU and the PMC, and the biotechnology and other life science companies on the campus. But also at a national level through large-scale infrastructures and gravity programs, and at a European level in Horizon 2020 programs and IMI consortia. And even at a global level in our collaboration with WHO. In particular, the move of the EMA to the Netherlands will stimulate the field of Drug Regulatory Sciences.

We wish you a happy reading and are proud and happy to be part of such an enthusiastic research community.

Albert Heck, scientific director  
Ed Moret, managing director



# Pharmacology

	FTE	Pubs	IF	Theses
2016	29.78	74	4.12	3
2017	34.17	94	4.35	3.2



# Chemical Biology and Drug Discovery

	FTE	Pubs	IF	Theses
2016	25.49	47	4.86	4
2017	35.79	42	6.42	2.2



# Biomolecular Mass Spectrometry and Proteomics

	FTE	Pubs	IF	Theses
2016	24.98	43	7.08	1
2017	28.82	60	9.59	4.2



# Pharmaceutics

	FTE	Pubs	IF	Theses
2016	39.31	72	6.93	3
2017	34.93	73	6.69	8.2



# Pharmacoepidemiology and Clinical Pharmacology

	FTE	Pubs	IF	Theses
2016	33.17	202	4.47	18
2017	27.94	205	4.60	19.2



# 78 Theses

Between 28  
October 2016 and  
26 October 2018

In 2016 Bert  
Leufkens was UU  
promoter of the  
year (10)

In 2017 Albert  
Heck was UU  
runner-up (10)

21-11-2016	Tom van Wijk	CBDD	Screening of potentially genotoxic impurities in pharmaceuticals by LC-MS and CE-MS.
30-11-2016	Bart Jacobs	NKI	Methods for improving the safety of fluoropyrimidine anticancer drugs.
19-12-2016	Loris Langedijk	PECP	Continuous innovation in the drug life cycle.
21-12-2016	Dandan Li	PHAR	Reduction-sensitive nanogels for tumor vaccination.
21-12-2016	Tom Achoki	PECP	Revisiting health system performance assessment in Africa. A landscape in transition.
11-1-2017	Daniel Ankrh	PECP	Pharmaceutical policies and access to medicines: a hospital-pharmacy perspective from Ghana.
25-1-2017	Erik Oude Blenke	PHAR	Intracellular delivery of RNA therapeutics with lipid nanoparticles.
6-3-2017	Anna Abbadessa	PHAR	Thermosensitive hydrogels for 3D bioprinting of cartilage constructs.
8-3-2017	Verica Ivanovska	PECP	Priority medicines for children. Exploring age-appropriate medicines and antibiotic use in children.
10-3-2017	Jan-Jaap Verhoef	PHAR	The interactions of complex structures with the immune system.
13-3-2017	Alii Yasmina Noorsyahdy	PECP	Antiplatelet drugs for secondary prevention of cardiovascular diseases: Drug utilization, effectiveness, and safety.
15-3-2017	Pedro Caetano Pinto	PCOL	The study of function and regulation of renal drug transporters in human proximal tubule epithelial cells.
22-3-2017	Soheil Varasteh	PCOL	Pharmaco-nutritional approaches to combat heat stress-induced intestinal barrier dysfunction.
29-3-2017	Emilia Sawicki	NKI	Solid dispersions in oncology: a solution to solubility-limited oral drug absorption.
26-4-2017	Raween Kalicharan	PHAR	New insights into drug absorption from oil deposits.
1-5-2017	Alba Cristobal Gonzalez de Durana	BMSp	Personalized proteomic profiles enabled by advances in mass spectrometry-based proteomics.
10-5-2017	Maartje de Groot	NKI	Towards better fall prevention: Examining the interplay between factors that influence gait in older patients.
14-6-2017	Patrick Wilten	BMSp	A proteomics perspective at human circulating cells.
21-6-2017	Anke Kip	NKI	Clinical pharmacology and bioanalysis of antileishmanial drugs: Towards improved treatment strategies for leishmaniasis.
26-6-2017	Yang Yang	BMSp	Exploring the sweetness of protein heterogeneity by hybrid mass spectrometry approaches.
26-6-2017	Ali Arabkhaaei	PECP	Pediatric asthma and allergy: An epidemiological approach.
27-6-2017	Marijke Zonneveld	PCOL	What mother is telling you: The messages encoded in milk-derived extracellular vesicles. Implications for the immune system and epithelial barrier function.
28-6-2017	Weiluan Chen	PHAR	Drug-eluting stent coatings for the treatment of bronchotracheal cancer.
3-7-2017	Yuan Chen	PHAR	Design and evaluation of polymeric nanogels with tailorable degradation and controlled drug release.
13-7-2017	Larry Liberti	PECP	Globally applicable facilitated regulatory pathways to improve equitable access to medicines.
24-8-2017	Heleen Bronsveld	PECP	Unravelling the link between diabetes, insulin treatment and breast cancer.
24-8-2017	Evans Sagwa	PECP	Optimizing the safety of multi-drug-resistant tuberculosis therapy in Namibia.

13-9-2017	Paula Perez Pardo	PCOL	Targeting the Gut-Brain axis in Parkinson's disease.
27-9-2017	Kim Notenboom	PECP	The pursuit of user-friendly medicines: older people in the hot seat.
2-10-2017	Shima Gholizadeh Soltani	PHAR	Liposomal and polymeric nanoparticles for targeted delivery of hydrophobic and hydrophilic drugs.
4-10-2017	Sharon Schouten-Tsin a Tjaji	PECP	The role of motivation in continuing education for pharmacists.
4-10-2017	Sander van den Bogert	PECP	Trials & Tribulations: Studies on the fate, transparency and efficiency of clinical drug trials.
11-10-2017	Jga Lipska	PECP	Variation in Health Technology Assessment of new medicines: processes and outcomes.
16-10-2017	Henk van den Toorn	BMSP	Computational proteomics: from numbers to biology.
18-10-2017	Michiel van de Waterbeemd	BMSP	Probing the composition, assembly and activity of protein molecular machines using native mass spectrometry.
23-10-2017	Mattijs van Haren	CBDD	Transition state mimics as inhibitors of methyltransferase enzymes.
24-10-2017	Gert-Jan Wagenvoort	PCOL	Pneumococcal disease and the impact of pneumococcal conjugate vaccines.
25-10-2017	RIK Ensing	PECP	Re-admission to primary care: the role of community pharmacists post-discharge.
30-10-2017	Alen Sevsak	CBDD	Guanidinium iminosugars as glycosidase inhibitors.
30-10-2017	Mette Heringa	PECP	Clinical decision support in community pharmacy.
15-11-2017	Benjamin Barasa	BMSP	Red blood cell proteomics: Challenges in biomarker discovery for clinical applications.
29-11-2017	Remy Verheijen	NKI	Clinical pharmacology of kinase inhibitors in oncology.: Personalized and optimized dosing
11-12-2017	Eduard Eberink	SANQUIN	Footprinting haemostatic networks.
18-12-2017	Emilie van Brummelen	NKI	Early clinical development of targeted anticancer agents.
18-12-2017	Renske Penning	BMSP	Dynamics of the neuroproteome: protein signaling and translation in neurological disorders.
20-12-2017	Linsay Raaijmakers	BMSP	From data to biological knowledge: a bioinformatics approach to study the role of proteins and their modifications in network biology.
20-12-2017	Vincent de Weger	NKI	Clinical pharmacology of novel anticancer agents: focus on oral formulations.
9-1-2018	Laurens Kleijn	CBDD	Synthetic and mechanistic studies with lipopeptide antibiotics.
21-1-2018	Ankie Hazen	PECP	Non-dispensing clinical pharmaceuticals in general practice: training, implementation and clinical effects.
7-2-2018	Gabriel Zamora Fallas	CBDD	Characterization of bioactive constituents from honey produced by Costa Rican stingless bees.
12-3-2018	Kimberley Span	PHAR	Therapeutic iron: Evaluation of methods to assess intravenous iron safety profiles and the development of a novel formulation for oral iron delivery.
12-3-2018	Ekaterina Baranova	PECP	Precision medicine: steps towards improving treatment with vitamin K antagonists and ACE-inhibitors.
19-3-2018	RIK Cleophas	CBDD	Immobilization of stabilized antimicrobial peptides in a bactericidal hydrogel coating.
10-4-2018	Kris van Keulen	PECP	Antipsychotics, delirium and glucose in older patients.
11-4-2018	Morgane Millienne-Petiot	PCOL	Manipulating the dopamine system to delineate mechanisms contributing to aspects of bipolar mania: a focus on learning, decision-making, impulsivity, and motivation.
18-4-2018	Hao Zhang	CBDD	Inhibition of galactins and O-GlcNAc transferase with di- and multivalent ligands.
23-4-2018	Xin Yang	CBDD	Synthesis of vancomycin mimics using ruthenium-catalyzed macrocyclization chemistries.
23-4-2018	Atanaska Kostadinova	PCOL	T cell epitopes and specific dietary symbiotics – together towards early life cow's milk allergy prevention: takes two to build tolerance.
25-4-2018	Jie Shi	CBDD	Peptide substrate-assisted study of O-GlcNAc transferase and O-GlcNAcylation.
9-5-2018	Amr Makady	PECP	Real-world evidence for health technology assessment of pharmaceuticals: opportunities and challenges.
30-5-2018	Michele Fedecostante	PCOL	Three-dimensional cell models for renal replacement therapy and drug screening.
6-6-2018	Fellong Sun	PHAR	Lipid-based mixed micelles for oral delivery of vitamin K.
11-6-2018	Mariette Nederlof	PECP	Monitoring patients using psychotropic drugs.
20-6-2018	Marlotte Vonk	PCOL	Supporting immunotherapy efficacy using novel nutrition based approaches to treat food allergy.
20-6-2018	Ton van Heugten	PHAR	Ointments: towards the understanding of structure, stability and processing.
25-6-2018	Thierry Schmidlin	BMSP	Novel methods and applications of data-independent and targeted mass spectrometry, towards robust quantification of molecular signalling events.
25-6-2018	Milos Mihajlovic	PCOL	A next step towards bioartificial kidney: preclinical safety evaluation.
27-6-2018	Maikel Herbrink	NKI	Pharmaceutics of oral anticancer agents and stimulants.
11-7-2018	Raymond Terheh	PECP	The use and safety of antiretroviral medicines: Lessons from Ghana.
29-8-2018	Fawaz Alharbi	PECP	Safety of antihypertensive drugs in clinical practice.
10-9-2018	Bo Lou	PHAR	Multifunctional polymeric nanoparticles for RNA delivery: from carrier design to cancer immunotherapy.
10-9-2018	Ling Xiao	PCOL	Human milk oligosaccharides: Mama's sweet immunological secrets.
17-9-2018	Rachael Williams	PECP	The added value of linked data in pharmacoepidemiology: solving the jigsaw puzzle.
19-9-2018	Lotte van Andel	NKI	Human mass balance and metabolite profiling studies of the new anticancer agents plitidepsin, lurbinectedin and niraparib.
24-9-2018	Linda Hemricks	NKI	Individualized dosing of fluoropyrimidines by genotyping and phenotyping of dihydropyrimidine dehydrogenase.
26-9-2018	Sietske Kooijman	BMSP	Biological responses in induced aluminum-based vaccine adjuvants.
15-10-2018	Teresa Menezes Leonardo Alves	PECP	Patient perspectives in pharmaceutical policy: information and influence in the diffusion of new medicines.
15-10-2018	Meng Lu	PCOL	The anti-inflammatory effects of short chain fatty acids on human endothelial and lung epithelial cells; Ferment your fruits and vegetables to battle NCDs!

# Life Sciences: Hubs

The Life Sciences hubs aim to bring excellent researchers from different disciplines together to work on societal relevant issues and scientific breakthroughs within the framework of One Health, Personalized Medicine & Health, Regenerative Medicine & Stem Cells, and Science for Life. The hubs stimulate productive and long lasting multidisciplinary collaborations with public and/or private stakeholders thereby creating shared value and, hence, societal and economic benefit.

*We're striving to create sustainable solutions that improve the well-being of animals and humans by combining knowledge and technologies ranging from the molecular level to the population level.*



## Utrecht Exposome hub

How does the totality of exposures that a person experiences combined with the associated biological response, relate to health and disease?



## Utrecht Molecular Immunology hub

How can novel ways of immune interventions improve immune responses in human and veterinary health and disease?



## Utrecht Advanced In Vitro Models hub

How can the co-creation, application and valorisation of in vitro models using beyond state-of-the-art technologies be improved leading to the reduction of...



## Utrecht Platform for Organoid Technology

How can the use of organoid models be optimised and improved in order to develop organoid based tests for personalized medicine?



# Pharmaceutics

2 November 2016

## Biosimilars should be easier to bring to market, suggest researchers in Lancet Biosimilars are as safe and efficient for use as cancer medication as the original

Biosimilars are biological medications made on the basis of an original drug for which the patent has expired. As a result, biosimilars are far less expensive than patented medicines. However, biosimilars must still be individually tested before they can be brought to the market. Huub Schellekens (Pharmaceutical Sciences) and his American and European colleagues are of the opinion that over the past 10 years, biosimilars have been sufficiently proven, so it should be made easier to bring them to market. This would dramatically reduce the cost of health care. Their research was published in Lancet on 2 November as a series of three articles on the safety of cancer medication in general.

Before a biosimilar reaches the market, it is of course necessary to prove that its safety, quality and effectiveness is comparable to the original drug on which it is based. The researchers state that oncological biosimilars that can be analytically shown to be closely similar to the original medication need less exhaustive clinical tests. They base their claim on the successful introduction of dozens of other biosimilars over the past decade.



### COMMONLY USED IN EUROPE

Schellekens also shows that biosimilars are safe and effective, and



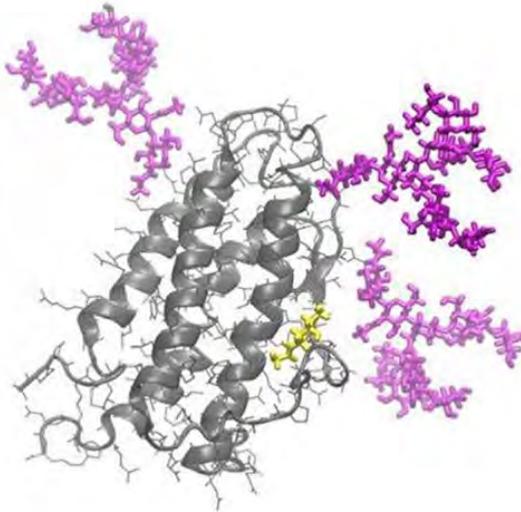
[www.uu.nl/en/news/biosimilars-are-as-safe-and-efficient-for-use-as-cancer-medication-as-the-original](http://www.uu.nl/en/news/biosimilars-are-as-safe-and-efficient-for-use-as-cancer-medication-as-the-original)

# BMSP, Pharmaceuticals

10 November 2016

Nature Communications publication

## Epo variants traceable with molecular fingerprints



Variations within proteins can now be proven with a greater degree of accuracy by analysing them using mass spectrometry. In a publication in Nature Communications, researchers at Utrecht University describe how they use the method to create an accurate molecular fingerprint of the protein erythropoietin,



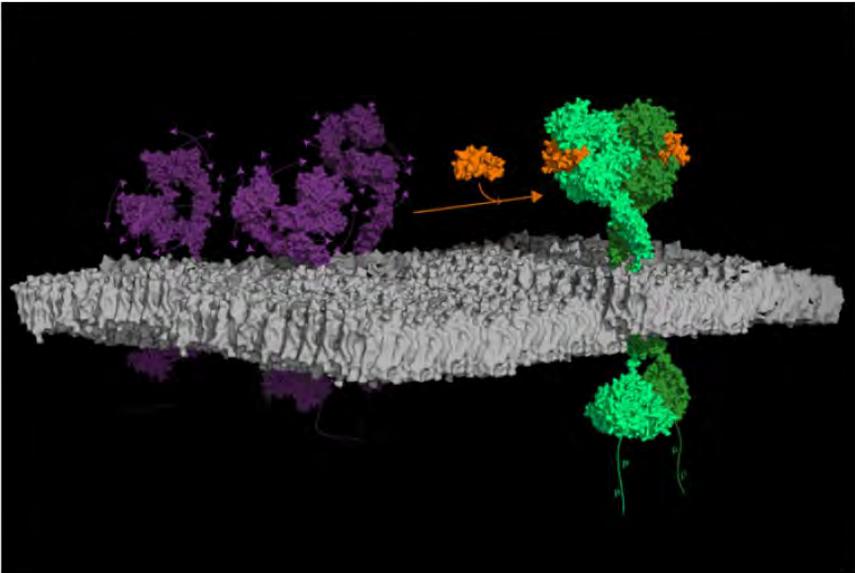
[www.uu.nl/en/news/epo-variants-traceable-with-molecular-fingerprints](http://www.uu.nl/en/news/epo-variants-traceable-with-molecular-fingerprints)

10 November 2016

# BMSP

Researchers observe receptor for cell division in action

## Important activation step to cancer revealed



Researchers at Utrecht University have revealed structural changes in a receptor that plays a key role in many types of cancer. The changes occur before and during receptor activation. These findings provide novel clues to develop medication to target the disease. For the first time, a receptor of this size could be studied in its natural environment. The researchers are publishing their results in



[www.uu.nl/en/news/important-activation-step-to-cancer-revealed](http://www.uu.nl/en/news/important-activation-step-to-cancer-revealed)

20 December 2016

# CBDD

ERC Consolidator Grant for pharmaceuticals researcher Nathaniel Martin

## “Developing new antibiotics is an arms race”



Antibiotics are essential, not only to combat short-term infections, but also to prevent infections during surgery and chemotherapy. However, bacteria are becoming increasingly resistant to antibiotics, which is reason for great concern. Nathaniel Martin (Pharmaceutical Sciences) has received an ERC Consolidator Grant of 2 Million Euros to combat antibiotic resistance. “Developing new



[www.uu.nl/en/news/developing-new-antibiotics-is-an-arms-race](http://www.uu.nl/en/news/developing-new-antibiotics-is-an-arms-race)

20 January 2017

# CBDD

ZonMw Antibiotics Resistance grant for pharmaceuticals researcher

## Nathaniel Martin: "We hope to revolutionise in vitro lab testing"



Nathaniel Martin (Pharmaceutical Sciences) has been awarded a ZonMw grant of 500,000 Euros to study drug-resistant Gram-negative bacteria. The Martin group will pursue new methods of sensitizing Gram-negative pathogens to antibiotics that are typically only active against Gram-positive strains. Gram-negative bacteria



[www.uu.nl/en/news/nathaniel-martin-we-hope-to-revolutionise-in-vitro-lab-testing](http://www.uu.nl/en/news/nathaniel-martin-we-hope-to-revolutionise-in-vitro-lab-testing)

24 January 2017

# BMSP

KWF grant

## The impact of drug holiday on drug resistance



Drug resistance greatly limits the impact of chemotherapy and targeted therapy: often, the tumor response is profound, yet transient. Whereas drug resistance can be a stably inheritable trait, evidence is accumulating that relapsed cancer patients can show a clinical response when re-challenged

with the same therapy after a so-called drug holiday. This may create a promising therapeutic opportunity.

[Dr. Maarten Altelaar](#) (UIPS) and dr. Daniel Peeper (NKI) have received a KWF grant to increase our understanding of the mechanistic basis, dynamics and identity of the signaling pathways that determine the (lack of) tumor response to drug holiday. To date, there is only limited insight into the mechanism of drug holiday sensitivity. Therefore, the mechanistic basis of this phenomenon is largely unknown. It likely involves key signaling networks that are used by tumor cells to adapt to the drugs they are exposed to, which creates a selective pressure for survival and proliferation. Dissection of these processes will shed important light on the dynamics and critical players of therapy response. This type of knowledge is vital to understand which elements in cancer cells may be amenable for therapeutic intervention.



[www.uu.nl/en/news/the-impact-of-drug-holiday-on-drug-resistance](http://www.uu.nl/en/news/the-impact-of-drug-holiday-on-drug-resistance)

26 January 2017

# Pharmaceutics

Pharmaceutics

PhD research at Pharmaceutics formed the foundation of the successful Dutch start-up company Cristal Therapeutics



*Cristianne Rijcken*

Recently, Cristal Therapeutics, a privately-held Dutch Life Science company



[www.uu.nl/en/news/phd-research-at-pharmaceutics-formed-the-foundation-of-the-successful-dutch-start-up-company-cristal-0](http://www.uu.nl/en/news/phd-research-at-pharmaceutics-formed-the-foundation-of-the-successful-dutch-start-up-company-cristal-0)

# CBDD

3 February 2017

## Success in the Horizon 2020 Marie Curie Fellowship programme Three Marie Curie fellowships in one group



*Photo by Ed Moret*

On 27 January 2017 the winners of the Marie Curie Fellowships were announced. With only 8% chance of success, three researchers from the [Chemical Biology and Drug Discovery group](#)  have been awarded a Fellowship. This group in the Utrecht Institute for Pharmaceutical Sciences recently changed its name from Medicinal Chemistry and Chemical Biology, since prof. Geert-Jan Boons became the new group



[www.uu.nl/en/news/three-marie-curie-fellowships-in-one-group](http://www.uu.nl/en/news/three-marie-curie-fellowships-in-one-group)

16 March 2017

# BMSP

Relatively simple system puzzled researchers for 10 years

## Operation of ancient biological clock uncovered



A team of Dutch and German researchers under the leadership of Albert Heck and Friedrich Förster from Utrecht University has discovered the operation of one of the oldest biological clocks in the world, which is crucial for life on earth as we know it. The researchers applied a new combination of cutting-edge research techniques. They discovered how the biological clock in cyanobacteria works in detail. Important to understand life, because cyanobacteria were the first organisms on earth producing oxygen via photosynthesis. The results of their



[www.uu.nl/en/news/operation-of-ancient-biological-clock-uncovered](http://www.uu.nl/en/news/operation-of-ancient-biological-clock-uncovered)

# Pharmacology, Pharmaceuticals

30 March 2017

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## RegMed XB is starting off with an initial budget of 25 million euros Launch new institute for regenerative medicine

On 30 March 2017, RegMed XB, a new collaboration on regenerative medicine, has launched. Utrecht University and UMC Utrecht are involved in this partnership. RegMed XB is starting off with an initial budget of 25 million euros, with the assumption that this will grow to 250 million over the next 10 years, attracting the participation of universities, healthcare funds, companies and national as well as regional authorities.

### Prospects of a cure

In the Netherlands millions of people are suffering from a chronic disease like diabetes, kidney failure or rheumatoid arthritis. Research into these diseases tends to focus on combating or treating the symptoms. The partners within RegMed XB want to go beyond this. They are working on regenerative medicine to cure patients through tissue and organ recovery. In other words, making the tissue and organs healthy again and thus avoiding the need for a transplant.

### First phase

The research within RegMed XB comprises three lines for which an initial 25 million euros has been made available. Researchers from Utrecht University/UMC Utrecht, the Hubrecht Institute, Leiden University Medical Center, Maastricht University and Eindhoven University of Technology are collaborating on this, along with the University of Leuven and the Flemish Institute for Biotechnology from Belgium. Seventeen companies are participating, sharing their expertise and facilities,



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[www.uu.nl/en/news/launch-new-institute-for-regenerative-medicine](http://www.uu.nl/en/news/launch-new-institute-for-regenerative-medicine)

24 April 2017

# UIPS

Center for World University Rankings

## Utrecht University at position 5 in the field of Pharmacology and Pharmacy

World Rank	Institution		Score
1	Harvard University		100.00
2	University College London		94.55
3	University of Toronto		93.74
4	University of Barcelona		93.67
5	Utrecht University		92.45
6	Seoul National University		92.38
7	University of Copenhagen		92.25
7	University of North Carolina at Chapel Hill		92.25

In the CWUR 2017 ranking, Utrecht University can be found 16 times in the top 10 of subject fields, which places UU at position 37 worldwide. Utrecht is deemed to be number one in [physical geography](#) . Other top 5 positions are in the following fields:



[www.uu.nl/en/news/utrecht-university-at-position-5-in-the-field-of-pharmacology-and-pharmacy](http://www.uu.nl/en/news/utrecht-university-at-position-5-in-the-field-of-pharmacology-and-pharmacy)

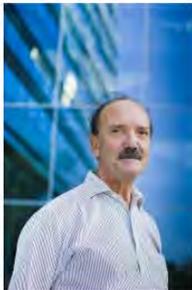
5 June 2017

# Pharmaceuticals

Commentary in Nature Biotechnology

## Personalised medicine produced in a “Bionexpresso”

In the current pharmaceutical model personalised medication designed for a specific individual patient will never be possible. It takes too long to develop and will be too expensive. A break through is bedside development and production, because the products do not need an expensive and time consuming marketing authorization procedure. Professor Huub Schellekens of Utrecht University makes this assertion in a publication in the respected scientific journal Nature Biotechnology this week. In an editorial devoted to the article, the journal emphasises the importance of his concept.



*Prof. Huub Schellekens,  
Utrecht University*

The advantage of preparing pharmaceuticals for an individual patient in the hospital pharmacy is that this is considered as ‘magistral production’. This means the medicine is made on the basis of a prescription of a physician. Therefore it is not subject to regulatory requirements such as marketing authorization, which is extremely expensive and involves an evaluation procedure that can take several years. This is much too long for a patient suffering from a serious disease that requires personalised medication, asserts Huub Schellekens, Professor of Pharmaceutical Biotechnology at Utrecht University.



[www.uu.nl/en/news/personalised-medicine-produced-in-a-bionexpresso](http://www.uu.nl/en/news/personalised-medicine-produced-in-a-bionexpresso)

## Prince Claus Chair Inaugural Lecture by Professor Fatima Suleman

Professor Fatima Suleman will formally accept her appointment to the Prince Claus Chair in Development and Equity 2016/2018. She will deliver her inaugural lecture, entitled: “Affordability and equitable access to (bio)therapeutics for public health” on the 16th of May 2017 in the University Hall (Academiegebouw).

Dr. Fatima Suleman, associate professor of Pharmaceutical Sciences at the University of KwaZulu-Natal in South Africa, has been appointed to the Prince Claus Chair of Development and Equity as of 1 September 2016. During the next two years, she will be conducting research in affordable (bio)therapeutics in collaboration with scholars at Utrecht University, other scholars in the Netherlands and the World Health Organisation (WHO).

### **FATIMA SULEMAN**

In addition to her appointment to the University of KwaZulu-Natal, Fatima Suleman also has ties with Drake University in the United States. She is interested in equity and access to medicines, pricing and reimbursement policies and essential medicines, especially for chronic conditions which cause huge suffering. Fatima Suleman is the Chair of the National Pricing Committee for medicines in South Africa and has taken part in various international committees on drug pricing including an informal panel at WHO on fair pricing. In addition she is a member of the WHO Expert Committee on the selection and Use of Essential Medicines.



6 June 2017

# PECP

## Prof. Ton de Boer new President of the Dutch Medicines Evaluation Board



*Prof. Ton de Boer, Utrecht University*

As of 1 August 2017, Ton de Boer, Professor of Pharmacotherapy at Utrecht University, will be appointed as the new Chairman of the Medicines Evaluation Board (MEB) of the Netherlands. De Boer is a physician, clinical pharmacologist



[www.uu.nl/en/news/prof-ton-de-boer-new-president-of-the-dutch-medicines-evaluation-board](http://www.uu.nl/en/news/prof-ton-de-boer-new-president-of-the-dutch-medicines-evaluation-board)

23 June 2017

# CBDD

Publication in PNAS

## Research on active substances in breast milk can begin

Hundreds of unique sugars make the difference between cow's milk and human breast milk. Some of these sugars are already known to contribute to the baby's immune system, but until recently, more detailed research into individual ones was impossible as the sugars could not easily be obtained in pure form. Researchers at Utrecht University and the University of Georgia have now developed a method to do just that. The publication about their findings were published in the scientific journal PNAS last week.

In the article, the researchers describe their proof of principle for the synthesis of almost all complex sugars found in human breast milk. "The current collection of approximately 100 synthetic sugars makes it now possible to start examining the influence of each individual one on the baby's health. In the future, it may even be possible to enrich baby formula with some of these sugars, resulting in substantial health benefits", research leader Prof. Geert-Jan Boons explains.



*Geert-Jan Boons*



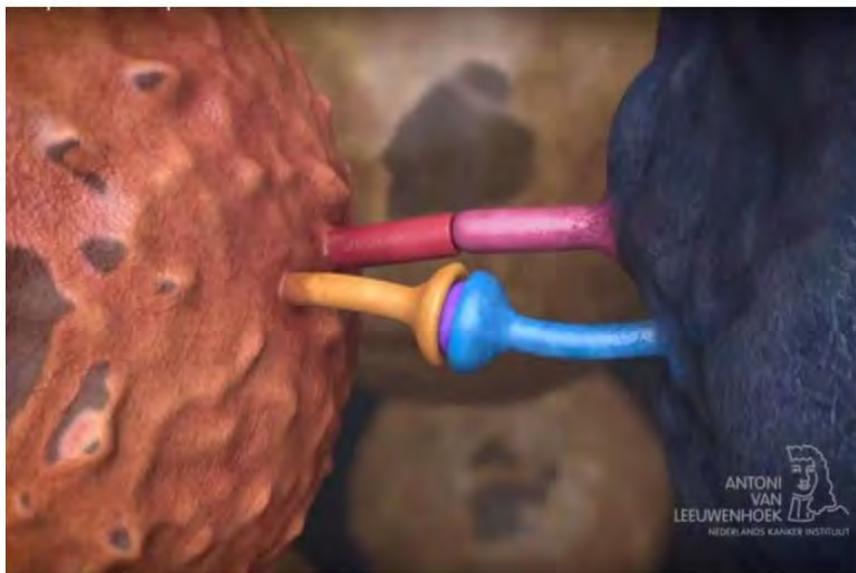
[www.uu.nl/en/news/research-on-active-substances-in-breast-milk-can-begin](http://www.uu.nl/en/news/research-on-active-substances-in-breast-milk-can-begin)

22 August 2017

# BMSP

Nature-publication

## Popular immunotherapy target turns out to have a surprising buddy



The majority of current cancer immunotherapies focus on PD-L1. This well studied protein turns out to be controlled by a partner, CMTM6, a previously unexplored molecule that is now suddenly also a potential therapeutic target.



[www.uu.nl/en/news/popular-immunotherapy-target-turns-out-to-have-a-surprising-buddy](http://www.uu.nl/en/news/popular-immunotherapy-target-turns-out-to-have-a-surprising-buddy)

# Pharmacology

24 August 2017

Oration Aletta Kraneveld on 6 September

**“The intestines are our most beautiful organs”**



“We are our intestines”, is the claim that Professor of Pharmacology [Aletta Kraneveld](#) will make during her inaugural lecture on 6 September. Kraneveld studies the ‘gut-brain-axis’: the vital interactions between the intestines and the brain that regulate sickness and health. “Scientists now know that the intestines and the brain communicate with one another”, Kraneveld explains, “but we still



[www.uu.nl/en/news/the-intestines-are-our-most-beautiful-organs](http://www.uu.nl/en/news/the-intestines-are-our-most-beautiful-organs)

30 August 2017

# UIPS

Utrecht Award for Excellence in Pharmaceutical Research 2017

## Utrecht Award for prof. Paul Parren, Leiden University



*Photo by Karin Hens*

On June 23, 2017 prof. Paul Parren received the [Utrecht Award for Excellence in Pharmaceutical Research 2017](#) . The award, given every two years, was handed out by prof. Albert Heck, scientific director of the [Utrecht Institute for Pharmaceutical](#)



[www.uu.nl/en/news/utrecht-award-for-prof-paul-parren-leiden-university](http://www.uu.nl/en/news/utrecht-award-for-prof-paul-parren-leiden-university)

31 August 2017

# UIPS, S4L

Science for Life International Research Assessment

## Life Sciences institutes Faculty of Science assessed as world leading

The four Life Sciences institutes at the Faculty of Science are among the world's best, according to an international research assessment committee, earning ratings of excellent (10x) and very good (2x). "We form a community that encourages people to excel", acknowledges Prof. Marc Baldus, Director of Science for Life, the collaborative effort of the four institutes.

Science for Life is one of the four sub-themes of Utrecht University's strategic research theme Utrecht Life Sciences. It is a collaboration by the Bijvoet Centre for Biomolecular Research, the Institute of Biodynamics and Biocomplexity (IBB), the Institute of Environmental Biology (IEB) and the Utrecht Institute for Pharmaceutical Sciences (UIPS). Over 100 research leaders are affiliated with Science for Life.

### WORLD LEADING

According to the review committee, each of the Science for Life institutes is 'world leading'. Their output, both in numbers of publications and in numbers of citations, is extremely high. In the category 'research quality', the institutes all received a score of '1' for 'excellent'. This is also the result of the collaboration and cross-fertilization that is present within Science for Life, Baldus says. "We are a community that truly enjoys working together. And the real breakthroughs very often come from bottom-up collaboration across scientific disciplines."



[www.uu.nl/en/news/life-sciences-institutes-faculty-of-science-assessed-as-world-leading](http://www.uu.nl/en/news/life-sciences-institutes-faculty-of-science-assessed-as-world-leading)

11 September 2017

# Pharmacology

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Relationship between brain and digestive system confirmed anew

## Nutritional supplements reduce symptoms of Parkinson's disease in mice

Utrecht University PhD candidate Paula Perez Pardo has shown that certain nutritional supplements can inhibit the occurrence and symptoms of Parkinson's disease in mice. Although Parkinson's disease is mainly known as a neurological disorder, patients also suffer from chronic digestive system complaints. These complaints often begin years before the motor system symptoms, such as shaking and slow movement, occur. With her research, Perez Pardo provides more proof for the relationship between the brain and the digestive system. She will defend her dissertation at Utrecht University on September 13.

There are more than 55,000 Parkinson's disease patients in the Netherlands. Parkinson's disease kills the brain cells that produce dopamine. Once 70% of these cells have died, patients begin to suffer from the motor system symptoms, such as shaking hands.

### **NO MEDICATION**

There is currently no medication for the treatment of Parkinson's disease. Patients are administered Levodopa to increase the production of dopamine, which helps to reduce their motor symptoms, but they must constantly continue to take the drug, which has serious side effects such as involuntary movements, nausea and confusion.



[www.uu.nl/en/news/nutritional-supplements-reduce-symptoms-of-parkinsons-disease-in-mice](http://www.uu.nl/en/news/nutritional-supplements-reduce-symptoms-of-parkinsons-disease-in-mice)

12 September 2017

# BMSP

Nobel Prize of the Low Countries

## Albert Heck and Alexander van Oudenaarden accept Spinoza Prize



*Spinozalaureaten: v.l.n.r Alexander van Oudenaarden, Michel Orrit, Albert Heck, Eveline Crone met staatssecretaris Sander Dekker en NWO-voorzitter Stan Gielen (credits: Melvin Tas)*

Today, Professors Albert Heck and Alexander van Oudenaarden from Utrecht University were presented with the Spinoza Prize by State Secretary Sander



[www.uu.nl/en/news/albert-heck-and-alexander-van-oudenaarden-accept-spinoza-prize](http://www.uu.nl/en/news/albert-heck-and-alexander-van-oudenaarden-accept-spinoza-prize)

12 September 2017

# PECP

95 percent experiences at least one problem

## Medication is often user-unfriendly for elderly patients



*Photo: iStock@SquaredPixels*

The user-friendliness of medical drugs needs to improve considerably. Pharmaceutical researcher Kim Notenboom of Utrecht University says this. She researched the problems the elderly experience in their use of medication and



[www.uu.nl/en/news/medication-is-often-user-unfriendly-for-elderly-patients](http://www.uu.nl/en/news/medication-is-often-user-unfriendly-for-elderly-patients)

14 September 2017

# Pharmacology

Innovative public-private partnerships

## Grants for Aletta Kraneveld, Peter van der Sluijs and Andries Meijerink

Researchers of the Faculty of Science have benefitted greatly from NWO's Chemistry Innovation Fund. Both Aletta Kraneveld (Pharmaceutical Sciences) and Peter van der Sluijs (Chemistry) have been awarded a LIFT subsidy, and Andries Meijerink (Chemistry) has received a CHIPP subsidy. They will work with an external firm to conduct research that should lead to innovative applications.

Aletta Kraneveld will join with Nutricia Research to study how mother's milk sugars bind to the cell. Peter van der Sluijs will work with biotech firm Galapagos to research the transport of the defective protein that causes Cystic Fibrosis, and how it can be influenced by substances that Galapagos has developed to correct the defect. Meijerink will collaborate with Kees Hummelen (RUG) and Marie Anne van de Haar from Seaborough Life Science to develop new nanomaterials for more effective light therapy to treat skin conditions.

### Chemistry sweetens the detection of milk sugars

*Aletta Kraneveld (Utrecht University) with Jeroen van Bergenhenegouwen (Nutricia Research)*

Milk oligosaccharides are unique sugar structures in mother's milk. In addition to being 'food for bugs' in the intestines, these sugars are also important for the child's immune system and brain development. However, scientists are as yet uncertain



[www.uu.nl/en/news/grants-for-aletta-kraneveld-peter-van-der-sluijs-and-andries-meijerink](http://www.uu.nl/en/news/grants-for-aletta-kraneveld-peter-van-der-sluijs-and-andries-meijerink)

1 November 2017

# BMSP

## Albert Heck appointed Distinguished Professor of the Faculty of Science



In recognition of his scientific contributions and the manner in which he places them in a social context, Albert Heck has been appointed Distinguished Professor of the Faculty of Science as of 1 November. Heck has served as Professor of Biomolecular Mass Spectrometry and Proteomics at the departments of



[www.uu.nl/en/news/albert-heck-appointed-distinguished-professor-of-the-faculty-of-science](http://www.uu.nl/en/news/albert-heck-appointed-distinguished-professor-of-the-faculty-of-science)

14 November 2017

# Students

## International research competition as booster of diversity Utrecht iGEM team wins gold in Boston

The Utrecht-based student team that participated in the final round of the iGEM competition won the gold medal. "An amazing achievement", according to professor Niels Geijssen (Hubrecht Institute and faculty of Veterinary Medicine), who supervised the team, together with professors Roos Masereeuw and Guido van den Ackerveken (both faculty of Science).



[www.uu.nl/en/news/utrecht-igem-team-wins-gold-in-boston](http://www.uu.nl/en/news/utrecht-igem-team-wins-gold-in-boston)

22 November 2017

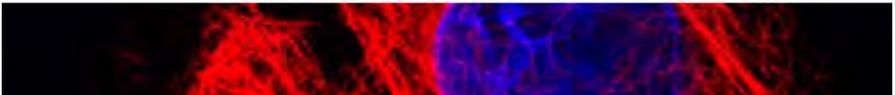
# BMSP

Publication in Science

## Enzyme-mystery solved after 40 years

Scientists have been searching for it for decades: the enzyme that cuts the amino acid tyrosine off an important part of the cell's skeleton. Researchers of the Netherlands Cancer Institute, the Hubrecht Institute and Maarten Altelaar of Utrecht University, have now identified this mystery player, which may be of vital importance to the understanding of cell function and division, and therefore the understanding of cancer. They published their finding in Science on November 16th.

Just like the human body as a whole, each human cell has a skeleton it needs for functioning properly. That so-called cytoskeleton allows a cell to maintain its shape, move to different places and transport molecules through its interior. Long chains called microtubules (see image) form an important part of that skeleton and function as a highway for the transport of molecules. For example, microtubules play a key role in cell division by allowing the cell to meticulously align their chromosomes before dividing them amongst daughter cells. Their crucial importance to the cell is easily illustrated by the working mechanism of a widely used group of cancer medicines called taxanes: they disrupt microtubule function and thereby kill dividing cells.



[www.uu.nl/en/news/enzyme-mystery-solved-after-40-years](http://www.uu.nl/en/news/enzyme-mystery-solved-after-40-years)

19 January 2018

# Pharmacology

Pharma giant Pfizer stops research on medication for Alzheimer's and Parkinson's: 'The question is still: where do these diseases start?'

Pharma giant Pfizer stops research on medication for Alzheimer's and Parkinson's diseases. Years of major investments still have not resulted in significant breakthroughs. "The question is still: where do these diseases start?", explains Alzheimer's researcher Prof. Elly Hol from the UMC Utrecht Neurological Centre. "It's time to look at neurodegenerative diseases from a new perspective", adds Parkinson's researcher and Utrecht University Professor Aletta Kraneveld.



*Prof. Elly Hol, University Medical Center Utrecht*

"Alzheimer's is a disease that develops very slowly. That means you have to follow patients for years before you know whether a new drug works or not. That makes research very expensive. From a pure cost-benefit analysis perspective, I can understand Pfizer's decision", replied Elly Hol, Professor at Utrecht University and President of the Scientific Advisory Council of Alzheimer Nederland.

## **PLAQUES, TANGLES AND AN INFLAMMATION REACTION**

Alzheimer's, Parkinson's and other diseases that affect neurons in the brain appear more difficult to understand than had been assumed. Hol explains that when you look at the brains of Alzheimer's patients under a microscope, you see three differences in comparison to normal



[www.uu.nl/en/news/the-question-is-still-where-do-these-diseases-start](http://www.uu.nl/en/news/the-question-is-still-where-do-these-diseases-start)

29 January 2018

# BMSP

Histidine signalling seems to be just as important as other routes

## Underestimated communication channel in cell exposed



*A specimen of Escherichia coli, the type of bacteria that was the subject of this study*

Communication and signalling within cells is controlled by minute changes to the proteins involved. Scientists have already studied three of these communication channels in detail, but a fourth, using phosphorylation of histidine, could as yet



[www.uu.nl/en/news/underestimated-communication-channel-in-cell-exposed](http://www.uu.nl/en/news/underestimated-communication-channel-in-cell-exposed)

1 February 2018

# PECP

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International context increasingly important

## Aukje Mantel-Teeuwisse appointed Professor of Pharmacy and Global Health



The Executive Board has appointed Aukje Mantel-Teeuwisse to the post of Professor of Pharmacy and Global Health at the Faculty of Science as of 1 February. Prof. Mantel-Teeuwisse will focus her research on the effects of policy measures on access to and use of medicines. Billions of people around the world

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[www.uu.nl/en/news/aukje-mantel-teeuwisse-appointed-professor-of-pharmacy-and-global-health-0](http://www.uu.nl/en/news/aukje-mantel-teeuwisse-appointed-professor-of-pharmacy-and-global-health-0)

# Pharmaceutics

22 February 2018

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## For growing plants at high density, nano-genetherapy and the speed of thought Vici grants for Ronald Pierik, Enrico Mastrobattista and Maarten Kole

Three Faculty of Science researchers have been awarded the prestigious Vici grant. The researchers are Prof. Ronald Pierik (Biology), Dr. Enrico Mastrobattista (Pharmaceutical Sciences) and Endowed Professor Maarten Kole (Netherlands Institute for Neurosciences/Biology). Only 35 of the 233 grant applications submitted were honoured with a grant. A Vici grant provides 1.5 million Euros for innovative research proposals, allowing the researchers to spend the next five years developing their own line of research and expanding their research groups.

Ronald Pierik will use his Vici grant to conduct research into how plants react to shade, and to develop an integrated computer model to study the phenomenon. He hopes that the results of his research will contribute to increasing agricultural yields. Enrico Mastrobattista aims to develop nanoparticles that can be used to correct genetic defects. His goal is to test the particles in a mouse model for serious liver diseases. Maarten Kole will use his grant to study the speed and precision of information processing in neuron ganglia at the nano scale.

### READ MORE:

[Ronald Pierik](#): Shedding light on the shadow side of high plant density

[Enrico Mastrobattista](#): Genetisch defect herstellen met CRISPR/Cas9 in nanodeeltjes



[www.uu.nl/en/news/vici-grants-for-ronald-pierik-enrico-mastrobattista-and-maarten-kole](http://www.uu.nl/en/news/vici-grants-for-ronald-pierik-enrico-mastrobattista-and-maarten-kole)

12 April 2018

# BMSP

## Utrecht University secures tens of millions for further development of research facilities



*Studying rocks in the High Pressure and Temperature Lab, part of the EPOS infrastructure.*

Thursday April 13<sup>th</sup> at Utrecht University in the presence of Minister Van Engelshoven of the Ministry of Education, Culture and Science, the Netherlands Organisation for Scientific Research (NWO) announced how it will distribute €138 million for the development of research facilities in the Netherlands.



[www.uu.nl/en/news/utrecht-university-secures-tens-of-millions-for-further-development-of-research-facilities](http://www.uu.nl/en/news/utrecht-university-secures-tens-of-millions-for-further-development-of-research-facilities)

PhD defence Amr Makady on 9 May

## Evaluating medicines using 'real-world data'

Data obtained from day-to-day clinical practice and patients' experiences should exert more influence on the decision on whether or not to reimburse the costs of medications. That is the conclusion Utrecht University PhD Candidate Amr Makady reached during his research. Makady defended his dissertation on Wednesday, 9 May.

In order to support their decision-making process, policymakers usually use the results of health technology assessments (HTAs), which are primarily informed by randomised clinical studies using pre-selected, homogeneous groups of patients and controlled protocols to monitor the patients. However, in order to better understand how a medication works, policymakers should also have access to 'real-world data'.

### **ADMISSION TO BASIC HEALTHCARE PACKAGE**

Information from the real world can be collected from a variety of sources, through which patients can share their experiences with a medication, including patient registrations and even social media. Pharmaceutical researcher Amr Makady works at the National Health Care Institute, the Dutch government agency that evaluates the therapeutic value and cost-effectiveness of pharmaceuticals. The Institute then advises the minister on the admission of medications to the basic healthcare package. "Reactions in a patient forum, for example, can show that a medication doesn't work as well in practice as it did in the clinical studies. Or that a medication has unpleasant side effects, but the patients feel that the benefits justify the side



[www.uu.nl/en/news/evaluating-medicines-using-real-world-data](http://www.uu.nl/en/news/evaluating-medicines-using-real-world-data)

8 May 2018

# CBDD

Excellence in glycoscience at UIPS

## Dr. Nuria Martinez Saez wins Young Researcher Award 2018



*Photo by Ed Moret*

The International Carbohydrate Organization has awarded the Young Researcher Award for 2018 to Dr. Nuria Martinez Saez.

She is a Marie Curie postdoctoral fellow at the Chemical Biology & Drug Discovery



[www.uu.nl/en/news/dr-nuria-martinez-saez-wins-young-researcher-award-2018](http://www.uu.nl/en/news/dr-nuria-martinez-saez-wins-young-researcher-award-2018)

2 July 2018

# Pharmacology

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'This strengthens our international network in a continuous and lasting manner'

## Regenerative Medicine launches programme for 29 new researchers

University Medical Center Utrecht and Utrecht University are teaming up to launch a COFUND programme called RESCUE. In February 2019, a group of 29 young researchers will begin a four-year research project at Regenerative Medicine Utrecht (RMU). Recruitment starts today.

RESCUE is being funded through a so-called Horizon 2020 Marie S. Curie COFUND grant, a project of the European Union which aims to stimulate researchers' international mobility. The researchers who come to Utrecht for this project may not have resided in the Netherlands for more than 12 months during the last three years. In practice, this means that mostly international researchers will be eligible for the vacancies.

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*It is very special to have all these different disciplines within regenerative medicine together under one roof*

"The long-term objective is to strengthen the international regenerative medicine network in a continuous and lasting manner", says Paul Coffey, Professor of Stem Cell Biology and research coordinator for RESCUE. "Over the next four years, we can build a connection with the future



[www.uu.nl/en/news/regenerative-medicine-launches-programme-for-29-new-researchers](http://www.uu.nl/en/news/regenerative-medicine-launches-programme-for-29-new-researchers)

3 July 2018

# BMSP

'A special honour, especially since they are two completely different awards'

## Professor Albert Heck is to receive two international distinctions



Albert Heck, Professor of Biomolecular Mass Spectrometry and Proteomics, is to receive two international distinctions this summer for his work in biochemistry and mass spectrometry: the prestigious Sir Hans Krebs Medal and the Thomson Medal and Prize. 'It is a wonderful and special honour, especially since they are



[www.uu.nl/en/news/professor-albert-heck-is-to-receive-two-international-distinctions](http://www.uu.nl/en/news/professor-albert-heck-is-to-receive-two-international-distinctions)

11 July 2018

# Pharmacology

## Aletta Kraneveld and Alex Schönhuth in national project 'MyOwnResearch' Utilising patient experiences to obtain scientific insights faster

The national research project 'MyOwnResearch', including Utrecht University professors Aletta Kraneveld and Alex Schönhuth, has been awarded a grant of 2.6 million Euros. MyOwnResearch aims to obtain a better understanding of the effectiveness of ways that people suffering from a chronic disease use, attempting to improve their health. These insights can help to obtain scientific insights that benefit all patients faster. The project financing was made possible by the health fund organisation *Samenwerkende Gezondheidsfondsen* and the Top Sector Life Sciences & Health.

People with a chronic illness often try to find ways to live as fit and healthy as possible. However, the results of these individual journeys are hardly utilized. The MyOwnResearch project aims to change all that by developing a suitable methodological approach.

### **PROBIOTICS AND OTHER SUPPLEMENTS**

MyOwnResearch will focus on the common combination of fatigue and intestinal symptoms among people who suffer from a chronic illness, and for whom treatment with probiotics and other supplements may present a potential alternative. Recently, scientists have learned a great deal about the importance of intestinal health for brain fitness and general bodily health.



[www.uu.nl/en/news/utilising-patient-experiences-to-obtain-scientific-insights-faster](http://www.uu.nl/en/news/utilising-patient-experiences-to-obtain-scientific-insights-faster)

11 July 2018

# Pharmacology

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Educational differentiation and personalised learning

## Ferdi Engels appointed Professor of Design and Development of Science Curricula in Higher Education



The Executive Board of Utrecht University has appointed Ferdi Engels to the position of Professor of Design and Development of Science Curricula in Higher Education as of 1 July. Within this broad assignment, Engels will focus on new

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[www.uu.nl/en/news/ferdi-engels-appointed-professor-of-design-and-development-of-science-curricula-in-higher-education](http://www.uu.nl/en/news/ferdi-engels-appointed-professor-of-design-and-development-of-science-curricula-in-higher-education)

27 July 2018

# CBDD

## ERC Starting Grant for pharmaceutical researcher Robert de Vries



Robert de Vries, Assistant Professor Chemical Biology and Drug Discovery, receives a Starting Grant of 1.5 million euros from the European Research Council (ERC). With this grant, De Vries will investigate which sugar molecules are functional receptors for influenza viruses, with the aim of developing better vaccines. ERC Starting Grants are awarded for pioneering research proposals and offer researchers the opportunity



[www.uu.nl/en/news/erc-starting-grant-for-pharmaceutical-researcher-robert-de-vries](http://www.uu.nl/en/news/erc-starting-grant-for-pharmaceutical-researcher-robert-de-vries)

20 August 2018

# BMSP

The production of this therapeutically-used EPO and similar biological medicines can now be taken to the next level

## Improved method for quality control of biopharmaceuticals

Apart from its illicit usage by top athletes, EPO is a medicine for patients who suffer from anemia. The production of this therapeutically-used EPO and similar biological medicines can now be taken to the next level through a method developed by researchers from Utrecht University, the Netherlands, and Copenhagen University, Denmark.

Their method allows to discern and classify EPO variants they design and produce, finetuning their glycosylation content in the process. This is essential in the optimization of the production of EPO variants that benefit each patient best. The results of their study are published in Nature Communications today.

### Fast, sensitive and global analysis

With EPO as a showcase, the researchers foresee that their method will generally enable the development and production of custom-designed biological medicines. "Our method offers a fast, sensitive, and global analysis of the many variants that are produced," first author and PhD student from Utrecht University Tomislav Čaval explains. "This is essential to



*The pharmaceutical industry is introducing biosimilar and biobetter products. These are modified versions of the original blockbuster pharmaceuticals.*



[www.uu.nl/en/news/improved-method-for-quality-control-of-biopharmaceuticals](http://www.uu.nl/en/news/improved-method-for-quality-control-of-biopharmaceuticals)

# BMSP, PECP, Pharmacology

3 September 2018

## Faculty of Science Life Sciences researchers honoured in four Horizon projects Albert Heck and Wim Goettsch to lead two major European research projects

Life Sciences researchers at the Faculty of Science are involved in four major collaborative European Horizon 2020 projects. Two of these projects are led by researchers at Utrecht University: Albert Heck (EPIC-XS) and Wim Goettsch (HTx). Professors Aletta Kraneveld (GEMMA) and Alexandre Bonvin (BioExcel-2) are involved in two other projects.

Horizon2020 is the European subsidy programme for research and innovation in Europe. These subsidies are provided as part of the 'Excellent Science' and 'Societal Challenges' programmes. In total, the four projects will receive 41.5 million euros in subsidies, including 4.9 million euros for the research groups at Utrecht University.

### EPIC-XS – Albert Heck

In life sciences research, technologies that enable large-scale studies of the proteins in our bodies (proteomics), promise to be even more revolutionary than genomics for understanding the molecular mechanisms of complex



[www.uu.nl/en/news/albert-heck-and-wim-goettsch-to-lead-two-major-european-research-projects](http://www.uu.nl/en/news/albert-heck-and-wim-goettsch-to-lead-two-major-european-research-projects)

10 September 2018

# PECP

For innovative research with a global impact

## Bert Leufkens honoured with the Distinguished Science Award



In recognition of his exceptional contribution to the development of the pharmaceutical sciences, Utrecht University Prof. Bert Leufkens has been presented with the Distinguished Science Award by the International Pharmaceutical Federation. Leufkens received the award for his innovative



[www.uu.nl/en/news/bert-leufkens-honoured-with-the-distinguished-science-award](http://www.uu.nl/en/news/bert-leufkens-honoured-with-the-distinguished-science-award)

18 September 2018

# BMSP

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## Prof. Joshua Coon appointed as F.C. Donders Professor



The Executive Board has appointed Prof. Joshua J. Coon to the post of F.C. Donders Professor. Coon is a Professor of Chemistry and Biomolecular Chemistry at the University of Wisconsin-Madison, and one of the most prominent researchers in Proteomics worldwide. His appointment to the F.C. Donders Chair provides a unique possibility to cooperate with him and his research group in the field of Proteomics and Mass Spectrometry.



[www.uu.nl/en/news/prof-joshua-coon-appointed-as-fc-donders-professor](http://www.uu.nl/en/news/prof-joshua-coon-appointed-as-fc-donders-professor)

# Pharmacology

8 October 2018

Aletta Kraneveld takes part in international research project of 14,2 million  
The quest for the diet that will prevent autism



Foto: Pixabay

The prevention of autism through dietary adjustments among the risk group at an early age: this ultimate goal drives a major research project in which Utrecht University is taking part. After the European Commission had awarded a research grant of 14.2 million euros, the project marked its official launch last week.

Autism spectrum disorders (ASD) are prevalent around the globe among 1 in 59



[www.uu.nl/en/news/the-quest-for-the-diet-that-will-prevent-autism](http://www.uu.nl/en/news/the-quest-for-the-diet-that-will-prevent-autism)



# Videos

## Research

Please have a look at these videos



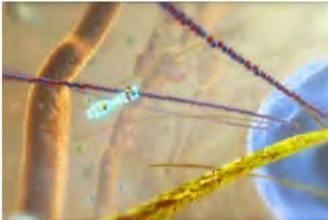
Pharmacology



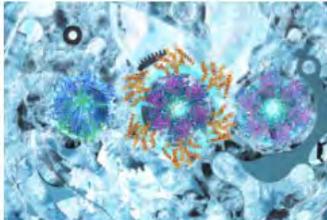
Bioinformatics



Glycoscience



Magic Bullet



A molecular clock



Proteomics: the movie



[www.uu.nl/en/research/utrecht-institute-for-pharmaceutical-sciences-uips/research](http://www.uu.nl/en/research/utrecht-institute-for-pharmaceutical-sciences-uips/research)