

Translational Medicine: Doing the Right Research Right

Eureka Institute and
Science in Transition

Utrecht Summerschool
Course 2018

July 9th – 13th 2018
Utrecht, The Netherlands



UMC Utrecht



EUREKA
INSTITUTE
for translational medicine

Child health: science for life





Dear participant,

It is with great pleasure that I welcome you to the summerschool course about translational medicine. Translational medicine is at the heart of biomedical research but doesn't always get the appreciation it deserves. UMC Utrecht plays a significant role in fueling the debate about the relative under-appreciation of bench-to-bedside research, which is part of a larger Dutch and international debate about relevance, that is impact and quality, of biomedical research.

With the Science in Transition initiative, rooted in UMC Utrecht and that started in 2013 we pointed to the incentive and reward system of biomedical science that may push researchers into valuing publications, in peer-reviewed journals more than efforts to bring results from the laboratory into clinical practice. The challenge of course is to understand why this is and how to change it.

With this summerschool course UMC Utrecht takes its responsibility to aim for the next level in biomedical research and innovation. Like in the clinic we don't stop after making the diagnosis, we are devising therapy and trying treatments as well. As we see it, educating a new generation, aspiring translational researchers is part of the solution.

Therefore, with this summerschool you will not only obtain insight in how science really works, but more importantly, you will acquire knowledge on how to be a successful translational researcher yourself. This course is specifically not about learning how to 'play the game', but about understanding that there is a game going on, what the rules of the game are and to be able to transcend it. You will be informed about the latest developments in translational medicine, inspired by rare diseases, and you will develop professional skills that are essential to becoming a translational researcher.

I wish you an inspiring week and I hope the course will be of great importance and guidance for your future as a biomedical professional who wants to impact the lives of patients.

Prof. Frank Miedema
Dean and vice-chairman of the board, UMC Utrecht
& one of the founders of Science in Transition





Dear participant,

It is with a mix of pride, great expectations and trepidation that I welcome you to the course "Translational Medicine: Doing the Right Research Right", an offering of the Utrecht University as a part of its Summer School and at the same time an initiative which is inspired by and is an integral part of the Eureka Institute for Translational Medicine. Our objective is not to provide you with certainties or burden you with pre-digested knowledge, but rather to inspire you questioning your own notions and hopefully gently shake their foundation.

What we seek is what you seek: to shorten the distance between the unmet need and its solution by inspiring and catalyzing a copernican revolution in Medicine, one which puts patients in the center of the process, one which will truly make a difference in the way we conceive and practice in our respective fields.

The needs are particularly poignant and the opportunities tantalizing in the area of Rare Diseases. Indeed, Rare Diseases are often neglected by Pharma and Science alike, and, too often, also by Society. The tools available are often inadequate, the number of patients insufficient, the critical mass unappealing. Yet, Rare Diseases have contributed to Translational Medicine in a creatively disproportionate fashion. You will have the opportunity to forge a new vision of Translational Medicine, one where study design, clinical and scientific questions, even policies, are molded around the Patient.

We welcome you to the Eureka community. Our best wish is that your enthusiasm, creativity and energy will help propel all of us, together, toward new horizons, in the sole interest of the advancement of Medicine.

Prof. Salvatore Albani, MD, PhD
President EUREKA Institute
Director, SingHealth Translational Immunology and
Inflammation Centre



Faculty Roster - July 2018

Annemieke Aartsma, PhD

Professor of Translational Genetics, Department of Human Genetics, Leiden University Medical Center

Salvatore Albani, MD, PhD,

Professor, Duke-NUS Medical School Singapore, Director, Translational Immunology Institute, UCAN-A Chair, President, Eureka Institute

Jeffrey Beekman, PhD

Associate Professor, Dep. Of Paediatric Pulmonology/Regenerative Medicine Center, UMC Utrecht

Rinze Benedictus, MSc

Staff advisor UMC Utrecht & Science in Transition

Dirk Elewaut, MD, PhD

Professor of rheumatology and immunology and Chair of the Department of Rheumatology at Ghent University Hospital, a EULAR and FOCIS center of excellence, VIB Inflammation Research Center-UGent

Kors van der Ent, MD, PhD

Professor in Paediatric Pulmonology and director of the Child Health program of the University Medical Center Utrecht

Sabine Fuchs, MD, PhD

Pediatrician in metabolic diseases at the Wilhelmina Children's Hospital / University Medical Center Utrecht

Johan Garssen, PhD

Professor Immunopharmacology, Utrecht University, Head Division of Pharmacology at Utrecht Institute for Pharmaceutical Sciences
Director Immune, Global Centre of Excellence, Danone/Nutricia Research

Michèle Gerbrands

Project manager co-challenge at Biomedical Sciences, UMC Utrecht

Brian Goeltzenleuchter, MFA

Artist, Faculty Fellow, The Weber Honors College, Research Fellow, The Institute of Public and Urban Affairs, San Diego State University

Natalia Gomez-Ospina, MD, PhD

Instructor Department of Pediatrics, Division of Medical Genetics, Stanford, CA, USA

Gianfranco Grompone, PhD, Engineer

Discovery Nutrition & health science leader at Lesaffre International, France

Janet Hafler, EdD

Professor of Pediatrics, Director of The Teaching & Learning Center, Associate Dean for Educational Scholarship, Yale School of Medicine

Bert van de Heijning, Ir, PhD

Principal scientist at Nutricia Research, Utrecht

Roos de Jonge, PhD

Advisor patient participation, Education Centre, UMC Utrecht

Belinda van 't Land, PhD

Senior Scientist Immunology at Nutricia Research, Utrecht

Ingrid Lether, MSc

Manager Research and Innovation, Reumafonds

Jorg van Loosdregt, PhD

Associate Professor, Laboratory of Translational Immunology

Madhvi Menon, PhD

Postdoctoral Research Fellow, Harvard Medical School and Brigham & Women's Hospital, Evergrande Center for Immunologic Diseases, Boston

Frank Miedema, PhD

Dean and Vice Chairman of the Board and professor of Immunology, University Medical Centre Utrecht

Joris van Montfrans, MD, PhD

Pediatrician – Immunologist, Division Pediatrics, Wilhelmina Children's Hospital / UMC Utrecht

Gerard Pasterkamp, MD, PhD

Professor and Head laboratory clinical chemistry at the UMC Utrecht

Berent Prakken, MD, PhD

Vice-dean and director of the biomedical education center at the University Medical Center Utrecht, Professor of pediatric immunology at the Wilhelmina Children's Hospital, chair UCAN-U

Hester den Ruijter, PhD

Translational scientist at the Laboratory of Experimental Cardiology, UMC Utrecht

Salmaan Sana

Educational Program Designer, Facilitator – Consultant, Meaningful Learning Specialist

Casper Schoemaker, PhD

Senior researcher and project leader at the National Institute for Public Health and the Environment (RIVM), the Netherlands / Advisor patient participation in research at the Wilhelmina Children's Hospital (UMC Utrecht), the Netherlands

Vicki Seyfert, PhD

Founder and CEO, My Own Med, Inc.

Anna van Suchtelen, MA

Artist, Writer

Francesco Saverio Tedesco, MD PhD FHEA

Reader in Stem Cells and Regenerative Medicine, NIHR Academic Clinical Fellow in Paediatrics, University College London (UCL), UK

Ghislaine van Thiel, PhD

Associate Professor at the Julius Center for Health Sciences and Primary Care of the University Medical Center Utrecht

Bas Vastert, MD, PhD

Pediatric rheumatologist at the Wilhelmina Children's Hospital, University Medical Centre Utrecht

Lucy Wedderburn, MD, PhD

Professor and Consultant of Paediatric Rheumatology, Director, Arthritis Research UK Centre for Adolescent Rheumatology at UCL, UCLH and GOSH, Deputy Lead Infection, Immunity, Inflammation, UCL GOS Institute of Child Health

Hilde de Winter, MD

Senior medical director at Ablynx, a Belgian biotech company

Nico Wulffraat, MD, PhD

Professor of Pediatric Immunology, University Medical Centre Utrecht, Chair Research and Education Division Pediatrics, chair UCAN CAN-DU

Organization

EUREKA Institute for Translational Medicine
(www.eurekainstitute.org)
Science in Transition (www.scienceintransition.nl/)
Child Health (www.umcutrecht.nl/en/Research/Research-programs/Child-Health)
Apollo Society (www.apollosociety.eu/)

Organizing committee

Rinze Benedictus
Brigitte van den Broek
Sabine Fuchs
Bert van de Heijning
Siri Homburg
Farah Kools
Bea van 't Land
Anneke Monninkhof
Berent Prakken
Erica Rokhs

Core Faculty

Rinze Benedictus
Sabine Fuchs
Natalia Gomez-Ospina
Gianfranco Grompone
Janet Hafler
Jorg van Loosdregt
Madhvi Menon
Marc van Mil
Joris van Montfrans
Gerard Pasterkamp
Berent Prakken
Annet van Royen
Hester den Ruijter
Vicki Seyfert
Francesco Saverio Tedesco
Bas Vastert
Lucy Wedderburn

Supporting Faculty

Emily Robinson

Course Coordination

Erica Rokhs

E-learning module

Farah Kools
Berent Prakken
Nienke Verdonk

Evaluations

Jean Xie Huijuan (Duke-NUS Medical School)

Utrecht Summer School Central office:

Bjorgunn Bretti
Anne van Dokkum
Dirk Faber
Maarten Paulusse

Janskerkhof 30a
3512 BN Utrecht
Tel. 0031.(0)30.253.4400
Email: summerschool@uu.nl

UMC Utrecht, Education Centre

Hijmans van den Bergh Building
Universiteitsweg 98
3584 CG Utrecht
Tel. +31 (0)88 75 533 16 (course coordinator)
Email: eroks@umcutrecht.nl

More information on Translational Medicine at UMC Utrecht:
<https://www.umcutrecht.nl/tm>



2016



2017

Monday July 9th

Location: Matthias van Geuns building
Descartes-Centre, 11th Floor
Bolognalaan 48
3584 CJ Utrecht



Tuesday July 10th

Location: Nutricia Research Utrecht
Utrecht Science Park
Meeting room Plaza 12
Uppsalalaan 12
3584 CT Utrecht



Wednesday July 11th

Location: Matthias van Geuns building
Descartes-Centre, 11th Floor
Bolognalaan 48
3584 CJ Utrecht



Thursday July 12th

Location: Landgoed Oostbroek
meeting room: Janssenzaal
Bunnikseweg 39
3732 HV De Bilt



Friday July 13th

Location: Matthias van Geuns building
Descartes-Centre, 11th Floor
Bolognalaan 48
3584 CJ Utrecht



About Translational Medicine

Today, the term “translational medicine” is a buzzword in biomedical sciences with a rapidly increasing number of meetings about it; courses on it; and institutes dedicated to it. At the time of writing, a simple Pubmed search on “translational medicine” generates over 100,000 papers, while a Google search yields nearly 24,000,000 hits. Because of its popularity and its increased use, the meaning of the term translational medicine has become progressively ambiguous and is often used synonymously with clinical testing. In our opinion, translational medicine encompasses the continuum of activities that extend from the conception of an idea all the way into Phase II/III clinical testing and, ultimately, the development of a tangible product. This itinerary includes multiple and diverse components requiring very different skills and competencies ranging from molecular medicine to pharmacology; from animal testing to clinical trial design; from intellectual property to venture capital.

Translational medicine is therefore the framework needed to ensure the evolution of novel technologies into tangible benefits for patients.

The Dutch Heart Foundation

The Dutch Heart Foundation (DHF) invests in basic clinical and translational research in the domain of cardiovascular diseases. Research consortia are stimulated to invest in the development of “translational skills” of young research talents. In one of the DHF private-public consortia, entitled CIRCA, we aim for the development of a device that can facilitate the early diagnosis of cardiac ischemia. This consortium also received a grant from the foundation that provides the opportunity to train young research talents in translational medicine. For the duration of three years 4-5 talented researchers are sponsored to join the Eureka Summerschool with generous support of the Dutch Heart Foundation.



About the course

Awareness, inspiration and training is what this course offers. Key opinion leaders increase your awareness of how science really works and how this shapes translational medicine. International experts provide you with a behind-the-scenes look at some of translational medicine's success stories. Excellent teachers will train you to become a successful translational researcher yourself, to make a difference in the field, with ample time for personal coaching and mentoring.

Child health: science for life



About the research program 'Child Health'

The UMC Utrecht is a center of excellence and has the formal position to deliver specialized care (so-called 'topreferente zorg'). Continuous improvement of high quality of care can only be achieved by high standards of scientific research and a clear focus on specific disease areas.

All diseases in focus of the Child Health program are characterized by their influence on the individuals' entire lifespan. These disorders often start at the beginning of life, or even before birth, and can have consequences far into adulthood. Within the Child Health program the 'Cycle of Life' approach is strongly intertwined with the so called 'Cycle of Innovation'. In this 'Cycle of Innovation' ambitious interdisciplinary teams of patients, clinicians and investigators – from bench to bedside to society - strive to develop and implement novel approaches for treatment, (early) diagnosis, prognosis and monitoring of children with chronic diseases to fulfill unmet medical and psychosocial needs, to improve the lives of these children and their relatives. Both cycles interact at any moment in our hospital.

The Child Health program links top referent care for pediatric patient groups to interdisciplinary research from fundamental to translational to longitudinal applied medical research. All chronic diseases in focus of the Child Health program share that they start in early beginning of life and can have consequences far into adulthood. These patient-focus areas are: periconceptual, ante- and perinatal damage, congenital and hereditary disorders, severe inflammatory disorders and oncology.

Apollo Society

Apollo is an international collaborative project between the EUREKA institute and its partner universities with the aim of supporting students to develop the knowledge, skills, and experience that will support a career in the field of translational medicine. Apollo was founded mid-2014 in Utrecht. It was named after the multifaceted Greek god of medicine. Apollo aims to bring together multifaceted medical students and scholars. We want our members to be a group of diverse individuals who stand out by means of their personality, work ethic, research experiences and their aim to be a leader in the field of translational medicine.

www.apollosociety.eu



UMC Utrecht



Universiteit Utrecht



PATHWAY – International career pathways and online curriculum for clinician-scientists



Within the field of translational medicine many initiatives recognize the delicate balance between biomedical research and patient care. In bridging the gap between bench and bedside, clinician-scientists play an essential role. Over the last decades however, it has become increasingly difficult to successfully carry out that role.

A strategic partnership between UMC Utrecht, Nutricia Research, University College London, Granada Medical School, and Ghent University aims to do something about that. PATHWAY is an Erasmus+ funded project active from 2017 to 2020. Its main objective is to create efficient, sustainable, and attractive career pathways for clinician-scientists thereby retaining them in the academic and industrial workforce, utilizing their unique set of skills to ultimately push translational medicine forward. Farah Kools (MSc) will be representing the PATHWAY project during the course

Science in Transition



Science is in need of fundamental reform. That is the belief of the initiators of Science in Transition.

Science has become a self-referential system where quality is measured mostly in bibliometric parameters and where societal relevance is undervalued.

The Science in Transition initiators have put forward their ideas in a position paper, organized a series of conferences and participated in many debates. Since 2013 this has added greatly to the debate among researchers and policy makers in The Netherlands and beyond.

Central to the Science in Transition analysis is the realization that we need new rewards and incentives for scientists, and we should involve societal stakeholders in setting the research agenda. Current incentives combined with hyper-competition for limited funds have severe negative effects: many publications of poor quality and limited societal impact; risk aversion and avoiding complex, multidisciplinary problems; systematic under-appreciation of education and other academic duties; very poor career perspectives for young scientists.

www.scienceintransition.nl/english

Translational Creativity



Anna van Suchtelen and Brian Goeltzenleuchter are internationally respected artists who have a long history of collaboration. Since 2011, they work for Eureka Institute for Translational Medicine, first as artists-in-residence, and later as part of the faculty for the program Eureka Translational Creativity, developed to complement Eureka's education and community building initiatives. For Utrecht Summer School 2018, Anna van Suchtelen and Brian Goeltzenleuchter have created an Applied Creativity workshop. Applied Creativity is a practical, yet academically vetted approach to creative process, designed for scientists and medical practitioners who strive to embrace the uncertainty that comes with collaborative and interdisciplinary learning and doing. Central to this approach is the idea that creativity is not a talent that one either has or does not have; rather it is a disposition that can be engaged and disengaged as needed to generate ideas, solve problems, build networks, facilitate collaboration, and assist in team-building. By means of concise lectures, discussions, and hands-on group projects, the tone of this course shifts between the comical, the philosophical, and the therapeutic.

Eureka Institute



The Eureka Institute is a non profit institute founded by an international group of leaders in translational medicine, educators, and institutional administrators. Eureka's mission is to develop a community of translational medicine professionals equipped to catalyze the application of discoveries for the benefit of human health. The institute does this through education and building a community of translational scientists. Among the activities of Eureka are a yearly certificate leaderships course in translational medicine in Siracusa, Italy. The next certificate course will be April 7 – 13, 2019. Eureka partners with major universities worldwide: Duke/NUS, SingHealth; Stanford University, University of Miami, University of Arizona and the UMC Utrecht. Nutricia Research and University College London are supporters of Eureka.

www.eurekainstitute.org

Day-to-day program

Eureka's 3th Summer School course "Translational Medicine: Doing the Right Research Right"
09.07.2018 – 13.07.2018

Course Director: Prof. Dr. Berent Prakken

Course coordinator: ms Erica Roks

Course Executive: Rinze Benedictus, Sabine Fuchs, Joris van Montfrans

E-mail: bprakken@umcutrecht.nl

Monday, July 9th

Location: Descartes-Centre, 11th Floor, Matthias van Geuns building,
Bolognalaan 48, 3584 CJ Utrecht

On this first day of the course you will get to know each other. You learn about the main issues in translational medicine and the translational scientist of the future. Also, you will be introduced in the sociology of science and start with your group assignment.

Chair of the day: Rinze Benedictus

Time	Title & speakers	Activity
8:15	Coffee	
8:30	Welcome by Frank Miedema dean of University Medical Centre Utrecht	Plenary session
8:45 -10:15	Team introduction and welcome by Janet Hafler	Group activity
10:30-10:45	Coffee break	
10:45-11:15	Introduction of the Program by Berent Prakken and Sabine Fuchs	Interactive lectures and plenary sessions
11:15-12:00	How to become a translational scientist and introduction to Eureka Interactive lecture on the challenges of translational medicine and the role of the translational scientist. Facilitator: Joris van Montfrans and Madhvi Menon Learning objectives: • Analyze the challenges of translational medicine • Discuss what it takes to become a translational scientist	Interactive lectures and plenary sessions
12:00-12:15	Introduction into Translational Creativity: Brian Goeltzenleuchter and Anna van Suchtelen	Professional skills
12:15-13:00	Lunch	

Time	Title & speakers	Activity
13:00-13:45	<p>Understanding how science really works Lecture by Frank Miedema. A 'view from the trenches' about the scientific method and associated myths.</p> <p>Abstract Science in Transition is a Dutch initiative in which four distinguished scientists gave a piercing analysis of the current state of Dutch universities. This received a lot of attention from public, policy makers and scientists. It added greatly to the debate in The Netherlands about scientific quality and was felt beyond the borders. Central to the Science in Transition analysis is the realization that we need new rewards and incentives for scientists, and we should involve societal stakeholders in setting the research agenda. Current incentives combined with hyper competition for limited funds have severe negative effects: many publications of poor quality and limited societal impact; risk aversion and avoiding complex, multidisciplinary problems; systematic under-appreciation of education and other academic duties; very poor career perspectives for young scientists. http://www.scienceintransition.nl/english</p> <p>Learning objectives</p> <ul style="list-style-type: none"> • Students will get insight into how modern science works as a social system. • Students will be able to reflect upon their own role, expectations and the potential actions they may want to make to achieve their personal goals as a scientist. 	Interactive lectures and plenary sessions
13:45-16:00	<p>Becoming agents of change in TM. Interactive session facilitated by Salmaan Sana</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> · Gain insight to how connect with others on a deeper level. · Develop awareness of ones motivation to do their work. · Finding a way to convert frustrations in to something constructive within TM · Define the things that gives energy with respect to TM · Understand how to construct one's own "change" question in relation to TM <p>The participants will be put to work to see and asked to challenge themselves and take leadership on their own struggles and wishes with TM in their own context.</p>	Professional skills
16:00-16:15	Coffee break	
16:15-16:30	<p>Introduction to Project Prometheus: From culturing cells to nurturing health Facilitator: Sabine Fuchs</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> • Get to know the road from bench to bedside guided by a real-life case in a rare disease • Practice collaborating over disciplines and cultures 	Group assignment
16:30-18:00	<p>Project Prometheus part 1: Start a translational medicine research proposal Facilitators: Sabine Fuchs, Rinze Benedictus</p>	Group assignment

Day-to-day program

Tuesday, July 10th

Location: Nutricia Research, Utrecht Science Park,
Uppsalalaan 12, 3584 CT Utrecht

Today you will learn to appreciate the difficulties of patenting, the roles of industry and academia in drug development and contemplate the challenges and opportunities of public private partnerships. You will also start your personal mentoring groups

Chair of the day: Bea van 't Land

Time	Title & speakers	Activity
8:15	Get together at meeting point at the entrance Hall of the Nutricia Research facility	
8:30	Introduction to the Nutricia Research Facility by Bea van 't Land	Interactive lectures and plenary sessions
8:45-9:15	Feedback and reflection Personal and interactive session, facilitated by Natalia Gomez, Joris van Montfrans and Janet Hafler	Professional skills
9:15-9:20	Welcome by professor Johan Garssen	Interactive lectures and plenary sessions
9:25-9:30	Introduction to discover your own style (session on Wednesday) By Madhvi Menon and Berent Prakken	
9:30-10:30	Key note lecture: The future of health care Speaker: Vicki Seyfert	Key note lecture
10:30-11.00	Resilience break & Coffee Gianfranco Grompone	Professional skills
11:00-12:00	Protect what's yours Why protecting intellectual property is crucial to successful innovation and translational medicine. By Gerard Pasterkamp , professor of experimental cardiology Learning objectives: <ul style="list-style-type: none"> • Protected knowledge may be of interest for investors or companies since it will allow an exclusive right to market the product. • Understand the statement of an investor: "what you publish too fast may be too bad for the patient" • Understand what you report where and how • Be able to delineate what is the definition of "public domain" 	Interactive lectures and plenary sessions
	Open science the other side of the coin? Patenting in times of Open Science: Rinze Benedictus	Debate/Critical thinking
12:00-13:15	Lunch and tour of the facility – Bea van 't Land and Bert van de Heijning	

Time	Title & speakers	Activity
13:15 -14:00	<p>Sleeping with the enemy: A stimulated dialogue about opportunities and pitfalls in public private partnerships With Hilde de Winter (biotech company Ablynx) and Dirk Elewaut (Flemish Institute for Biotechnology, Ghent University)</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> • Understand how to set up a meaningful relationship between a translational scientist and industry • Discuss potential pitfalls and risks • Explore how to work together in a respectful, unbiased and meaningful way 	Interactive lectures and plenary sessions
14:00 -14:45	<p>Personal experiences in navigating innovation between academia and industry Johan Garssen – Nutricia Research Moderator: Gianfranco Grompone</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> • Learn how you can connect Academia and Industry in your personal career • Discuss how you can play both roles without compromising your personal integrity 	Moderated debate
14:45-15:00	Coffee / Tea	
15:00-16:30	<p>Project Prometheus part 2 Set the next step on the translational road and come up with a good design for a clinical trial</p>	Group assignment
16:30-18:00	<p>Personal mentoring Take the time to share and discuss personal dilemmas with trusted and experienced senior researchers</p>	Professional skills



The 2017 participants

Day-to-day program

Wednesday, July 11th

Location: Descartes-Centre, 11th Floor, Matthias van Geuns building
Bolognalaan 48, 3584 CJ Utrecht

This day you will be stimulated to critically contemplate how to effectively navigate from bench to bedside together with patients. You will also be introduced to the powers of collaboration and will have an opportunity to speed-counsel with faculty

Chair of the day: Madhvi Menon

Time	Interactive lectures and plenary sessions	Activity
8:30-9:00	Coffee	
9:00-9:30	Feedback and reflection Personal and interactive session, facilitated by Natalia Gomez, Joris van Montfrans and Janet Hafler	Professional skills
9.30-10.30	From care to cure in Muscular Dystrophy. By Annemieke Aartsma-Rus , Professor of Translational Genetics, Department of Human Genetics, Leiden University Medical Center Learning objectives: • Understand that patients should be involved every step of the way of therapy development • Have ideas on how to involve patients in the different steps of therapy development.	Parallel session
	Building an international career in translational medicine by Lucy Wedderburn and Francesco Saverio Tedesco Learning objectives: • To review the challenges of successful international career in translational science • To learn about some methods for successful international collaborations	Parallel session
10.30-11:00	Coffee Break	
11:00-11.30	Discover your own style By Madhvi Menon and Berent Prakken	Professional skills
11:30-11:45	Resilience break Gianfranco Grompone	Interactive debate
11:45-12:30	Time for reflection	
12:30-13:30	Lunch	

Time	Interactive lectures and plenary sessions	Activity
13:30-14:45	<p>Moderated panel debate “Giving a voice to patients” Facilitator: Madhvi Menon and Vicki Seyfert A patient’s perspective on translational medicine. Are you ready to involve patients in your own research projects? Really? Will you ask them to help draw conclusions in your next paper? Why not?</p> <p>Panelists: Ingrid Lether, Manager Research and Innovation, Dutch Arthritis Foundation Casper Schoemaker, National Institute for Public Health and the Environment (RIVM) Roos de Jonge, Advisor patient participation, Educational Centre, UMC Utrecht</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> • There is a mismatch between what patients and health professionals want to see researched and the research that is actually done. Can research priorities generated by patients solve this problem? • To know and understand the need to involve patients in all stages of doing research and learn practical ways and means to actively involve patients in your research, to improve your clinical and societal impact. 	Interactive lectures and plenary sessions
15:00-15:30	Coffee Break	
15:30-17:00	<p>Inspirational speed counseling with a panel of established and upcoming clinical scientists</p>	Professional skills
17:30-19:30	<p>Introduction to the Child Health program by Kors van der Ent followed by networking event: Drinks, Bites & Tour of Children’s Hospital - meeting point ‘Kindertheater’</p>	
19:00	Faculty dinner at restaurant ‘ Meneer Buscourg ’, Lange Nieuwstraat 62, 3512 PL Utrecht (faculty only)	

Day-to-day program

Thursday, July 12th

Location: Landgoed Oostbroek, meeting room: Janssenzaal,
Bunnikseweg 39, 3732 HV De Bilt

Learn how to unleash your creativity and learn how to effectively work as a team and have true impact

Chair of the day: **Natalia Gomez**

Time	Title & speakers	Activity
8:30-9:00	Coffee	
9:00-9:30	Feedback and reflection: personal and interactive session Joris van Montfrans, Natalia Gomez and Janet Hafler	Professional skills
9:30-10:00	Outlining how science should work by Rinze Benedictus Abstract In response to the debate about the systemic flaws of science, many initiatives have sprung up all over the world, ranging from local pilots to national research policies. Many of these initiatives raise awareness, but quite a few have the ambition to really change how science works. Rinze Benedictus will provide an incomplete and intuitive overview of new policies and best practices. Learning objectives • Students will learn that on many levels science is changing • Students will appreciate that changing a global system can start with local ambition	Interactive lecture
10:00-10:15	Coffee Break	
10:15-13:00	Creativity & Science Facilitators: Anna van Suchtelen and Brian Goeltzenleuchter Learning objectives: • Recognize and develop your own creative potential, noting when it is most useful to engage as a tool for generating ideas and solving problems • Apply knowledge of self to facilitate interpersonal communication and collaboration • Demonstrate understanding of active learning, self-regulation, and metacognition and their value in the creative process • Demonstrate knowledge of available resources, techniques, and high impact creative activities to catalyze goals and facilitate pathways	Group assignment
13:00-14:00	Lunch	
14:00-15:30	Co-create the future of TM Project – team assignment (includes Coffee break) Moderators: Joris van Montfrans, Michele Gerbrands, Madhvi Menon, Farah Kools	Group assignment
15:30-17:30	Personal mentoring Take the time to share and discuss personal dilemmas with trusted and experienced senior researchers. Learning objectives: • You are able to work in a complementary team and use the available talents to discuss the aspects of mentoring • You are aware which aspects of mentoring are essential to effectively be a mentor • You are aware which aspects of mentoring are essential to you as the mentee • You can communicate these aspects in a creative and non-familiar way to the conference audience	Professional skills

Day-to-day program

Friday, July 13th

Location: Descartes-Centre, 11th Floor, Matthias van Geuns building,
Bolognalaan 48, 3584 CJ Utrecht

Think and debate important ethical and issues in TM. And prepare yourself for your future in Translational Medicine.

Chair of the day: Francesco Saverio Tedesco

Time	Title & speakers	Activity
8:00-8:30	Coffee	
8:30-9:00	Feedback and reflection Joris van Montfrans and Natalia Gomez	Professional skills
9:00-10:15	Thou shalt not... Interactive lecture on research integrity and ethics by Ghislaine van Thiel (assistant professor in medical ethics, UMC Utrecht) Learning objectives , participants will: <ul style="list-style-type: none">• Gain basic knowledge of research ethics, specifically on clinical trials involving children• Learn to assess ethical complexities of contemporary pediatric research	Parallel sessions
9:00-10:15	What should I do? Dilemma game about research integrity and publication pressure. By Rinze Benedictus and Madhvi Menon	Parallel sessions
10:15-10:30	Coffee Break	
10:30-11:30	Beyond the horizon: novel therapies for rare diseases Francesco Saverio Tedesco and Natalia Gomez Learning objectives: <ul style="list-style-type: none">• Understanding key challenges in developing therapies for rare disease• Successful examples of therapies for rare diseases and current state of tools• Overcoming challenges: a) basic science; b) translational challenges; c) from clinical trials to patients.	Parallel sessions
	How patients change our way of thinking Nico Wulffraat (pediatrician) with an introduction by Kors van der Ent , chairman of the Child Health research program Moderated by Vicki Seyfert Learning objectives: <ul style="list-style-type: none">• Which health related topics are relevant for children and parents?• Which tools are available for the dialogue between children/parents and health professionals?	Parallel sessions
11.30-12.45	Project Prometheus part 3: Stand and deliver Present your final research proposal to the other course participants in a moving debate. Incorporate the patient perspective.	Interactive lectures and plenary sessions
12:45-13:45	Lunch	

Time	Title & speakers	Activity
13:45-14:15	<p>How to successfully fail: building a different mindset for TM Gianfranco Grompone</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> • Students will reflect on the concept of failure: what is failure and success in TM? They will explore individual and collective examples. • How to progress through failure: discussion on how to create an open environment in TM which safely accepts failure. • Reflect on the importance of “baby steps” in TM and provide insights to identify and celebrate them. 	Parallel sessions
	<p>Mind the gap: early career steps as a translational scientist in North America Natalia Gomez & Madhvi Menon</p> <p>Learning objectives:</p> <ol style="list-style-type: none"> 1. Realize that there are different paths to becoming a translational-scientist <ul style="list-style-type: none"> • Combined training • Start in medicine • Start in basic science 2. How can my training be funded? 3. Early career milestones that will get you the job you want: <ul style="list-style-type: none"> • For a job in academia • For a job in industry • For a clinical job 	Parallel sessions
	<p>Mind the gap: early career steps as a clinician scientist in Europe Francesco Tedesco & Sabine Fuchs</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> • To explore different options to merge clinical and research training in Europe. • To discuss challenges facing young clinician scientists and strategies to overcome them. 	Parallel sessions
14:15-15:15	<p>Citizen Science Interactive dialogue with Vicki Seyfert and Hester den Ruijter</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> • How to bridge the gap between goals and reality in the real-world • Reflect on the role of a translational scientist in relation to society 	Moving debate
15:15-15:45	Coffee Break	

Time	Title & speakers	Activity
16:00-16:45	<p>A translational medicine success story: How organoids help solve clinical issues in cystic fibrosis Jeffrey Beekman, associate professor at UMC Utrecht</p> <p>Abstract: Translational medicine encompasses the translation of ideas into research and subsequent applications. Moving from concept to application requires a multidisciplinary approach, and usually takes a long breath. This lecture focusses on recent breakthroughs for the treatment of cystic fibrosis (CF), a monogenetic disease caused by dysfunction of a chloride channel in mucosal epithelia. Treatment of CF is shifting from symptom-targeted therapies to therapies that target the CF-causing mutant protein. Forbes magazine recognized the first CF-protein-targeting drug as 'most important new drug in 2012', and many new drugs are currently in development.</p> <p>Beekman and colleagues established and patented a novel individual test for CFTR modulators using individual adult stem cell cultures termed organoids. A collaborative effort enabled progression in 4 years from initial discovery to reimbursed 'off-label' treatments for the first people with CF. Starting as a principal investigator in 2010, Jeffrey Beekman will share some of the challenges encountered during this 'translational success story', particularly emphasizing on the process rather than the science.</p> <p>Learning objectives:</p> <ul style="list-style-type: none"> • To develop awareness of various stakeholders in a translational process • To identify personal challenges in a translational process. 	Interactive lectures and plenary sessions
16:45-17:15	<p>Wrap up and certifications Berent Prakken and Vicki Seyfert</p>	
17:15-17:30	<p>Evaluations Joris van Montfrans and Natalia Gomez</p>	
19:30	<p>Drinks and bites at brewery 'Stadskasteel Oudaen' and subsequent Conference Dinner</p>	

Administrative faculty biography



Erica Roks, course coordinator Erica has been teamed up with Berent Prakken for over 18 years now. She started off as secretary in the Wilhelmina Children's Hospital, became Berent's personal assistant in 2005 and supported him in numerous international projects/events. In 2016 she joined Berent as Project Assistant in his move to the UMC Utrecht Education Center. Erica has coordinated this Summer School course since 2016.

Supporting faculty biography



Emily Robinson is a training facilitator in Translational Research and links the EUREKA institute across the three UCL NIHR Biomedical Research Centres, UCLH, GOSH and Moorfields eye hospital. In this role she supports the London Apollo society as well as putting on a variety of translational research educational events across UCL. Emily has a background in health and exercise science research, as well as

previously working as a clinical respiratory physiologist. Working in a range of research environments, both conducting and supporting researchers in NZ, Canada and the UK she has seen the importance of successful translational research and is passionate supporting researchers across their own journeys.

Guest photographer biography



Thirza Luijten, BA 'My name is Thirza Luijten. After getting my photography degree at The Royal Dutch Academy of Art in The Hague I started working as a fashion photographer. Did a lot of travelling, then decided it would be nice for a change not to work solely with models, so switched to reportage and portraits. I also did still/behind the scenes photography on film/music video sets. Since 2016 I have been involved with the Summer School and I am very much looking forward to continuing that!'

Faculty biographies

About the speakers and moderators



About the speakers and moderators



Prof. Annemieke Aartsma-Rus is a professor of translational genetics at the Leiden University Medical Center. She played an important role in the development of the antisense mediated exon skipping therapy for Duchenne muscular dystrophy. Her work currently focuses on developing antisense-mediated exon skipping as a therapy for Duchenne muscular dystrophy. Her research involves work in cell and animal models to improve delivery and efficiency of exon skipping compounds, studies in muscle regeneration and pathology, the identification of biomarkers, studying the basics of pre-mRNA splicing and transcript processing and the generation of mouse models. On a networking level she tries to bring together stakeholders in drug development to discuss challenges. She was involved in organizing multiple seminal workshops and meetings, e.g. a stakeholder meeting on antisense-mediated exon skipping development for DMD and SMA involving academics, industry, regulators and patient

representatives hosted by the European Medicine Agencies (April 2015 and November 2016), a training school to educate young scientists in stakeholder communication (April 2015) and the annual ExPRESS Training school for patient representatives and researchers (together with EURORDIS).

Thus far, she has published over 140 peer-reviewed papers and 9 book chapters, as well as 14 patents and has edited one book. She has given many invited lectures at meetings, symposiums and workshops as well as patient/parent organizations meetings, where she is known for her ability to present science in a clear and understandable way. She has created and maintains multiple websites on therapeutic approaches for aimed at patients and parents. In 2011 she received the Duchenne Award from the Dutch Duchenne Parent Project in recognition of this work and her dedication to the Duchenne field.



Jeffrey Beekman leads a translational research group in the University Medical Center Utrecht that focuses on the development of individual readouts for disease progression and therapy response in cystic fibrosis (CF). He has been trained in molecular and cellular biology, and became principle investigator in 2010, focusing of CF. His lab developed an innovative functional assay in intestinal organoids that provides a patient-specific platform for analysis of CFTR residual function and CFTR-targeting drugs.

This platform facilitates preclinical drug efficacy screening in an individual manner, and is highly suited for drug development and patient stratification. His current work focusses on the implementation of this intestinal model to enable precision or personalized care for people with cystic fibrosis. Currently, the first patients have received treatments based on this personalized test, for which he was rewarded CF person-of-the-year 2017 by the European CF society.



Rinze Benedictus (MSc) works as a staff advisor at the UMC Utrecht, The Netherlands, and is involved in the Science in Transition initiative. This initiative, that gained significant political traction in The Netherlands, brought the debate about quality, reproducibility and relevance of scientific research in the limelight. Benedictus was trained a biologist, and after working as a science journalist, is now active in

science policy and management. At the UMC Utrecht he is developing and implementing new incentives and rewards for researchers. Benedictus is also doing PhD research about institutional policy-making processes that shape research governance and evaluation practices. This is supervised by the Centre for Science and Technology Studies, Leiden University, Leiden, the Netherlands.

About the speakers and moderators



Dirk Elewaut (MD, PhD) is a full professor of rheumatology and immunology and Chair of the Department of Rheumatology at Ghent University Hospital, a EULAR and FOCIS center of excellence. He obtained his MD at Ghent University in 1991 and his PhD in 1997 at the same institution. Following postdoctoral research at the University of California San Diego and the La Jolla Institute for Allergy and Immunology he joined the faculty of the Department of Rheumatology at Ghent University Hospital in 2001. He has published more than 200 scientific publications, and is

heading a team of 20 researchers of the Laboratory of Molecular Immunology and Inflammation at the same department. The team has recently joined the Inflammation Research Center (IRC) of the Flanders Research Institute for Biotechnology (VIB) where Dirk Elewaut has been appointed as principal investigator. His research interests are centered around translational aspects of immune regulation to combat inflammatory arthritis and associated joint damage, with special focus on spondyloarthritis.



Kors van der Ent (MD, PhD) (1962) is paediatrician, Professor in Paediatric Pulmonology and chair of the Child Health program. After medical training in Rotterdam and Utrecht he became a research fellow at the department of Paediatric Respiratory Diseases where he graduated in 1997 on a thesis on clinical and physiological aspects of tidal breathing analysis as a measure for airway obstruction in young infants. At the same year he founded the Utrecht Cystic Fibrosis Center, being the largest in the country, focusing on multidisciplinary and long-term centralised treatment of patients with CF. In 2000

he became head of the department of Paediatric Respiratory Diseases and Allergology and was appointed as professor since 2007. Van der Ent is the leader of the national HIT-CF program which focuses on the development and personalized application of new drugs influencing the basis genetic defect in patients with CF. This program includes both mechanistic studies in collaboration with the Hubrecht lab and the Byvoet Center as well as studies into host pathogen interaction in collaboration with the veterinary faculty of the Utrecht University



Sabine Fuchs (MD, PhD) is a pediatrician in metabolic diseases at the Wilhelmina Children's Hospital / University Medical Center (UMC) Utrecht. She studied pharmacy (cum laude) and medicine (cum laude) at the University of Utrecht. She combined her pediatric training with a PhD (ZonMW AGIKO) in the department of metabolic diseases in the Wilhelmina Children's Hospital / UMC Utrecht. She now combines clinical work with research in the field of genetic/metabolic liver diseases. In collaboration with the Hubrecht

Institute (prof. Clevers), she uses liver organoids to improve therapeutic strategies for patients with liver diseases – both as a unique in vitro model to develop and test novel treatment strategies and as a new source for liver stem cell transplantations. She further aims to improve pediatric care as a board member of TULIPS (Training Upcoming Leaders In Pediatric Science), an organization devoted to improving child health by empowering young clinician scientists to achieve high quality research.

About the speakers and moderators



Johan Garsen is Full Professor of Immunopharmacology at Utrecht University, where he's also Head of the Division Pharmacology at the Utrecht Institute for Pharmaceutical Sciences. At Danone/Nutricia Research, after several functions as from 2002, Johan is currently R&I Director Immune in the Global ELN Centre of Excellence Utrecht. He studied medicine and biology at the Free University, Amsterdam, Netherlands. He specialised in immunology, pharmacology and biochemistry and finished both studies in 1987 cum laude. He finished his PhD thesis at the University of Utrecht in 1991 on the role of T cells in respiratory allergy, an immunopharmacological approach. This PhD programme and a postdoc period was partly performed at Yale University, New Haven, USA. After the postdoc period he became senior scientist at the National Institute of Public Health in the Netherlands. There he coached many research projects,

both preclinical as well as clinical research, in the field of immunomodulation induced by a.o. nutritional ingredients, drugs and environmental agents. Johan Garsen published over 700 peer reviewed papers in the field of "immunomodulation". He is editorial board member for Elsevier "Pharma Nutrition" and co-edited "Pharma-Nutrition, An Overview" (2014-Volume 12 of Springer Series AAPS Advances in the Pharmaceutical Sciences), examining the effects of natural products and functional/medical foods (nutritional programming) on disease management. He has contributed to various grants, a.o. NWO, EU, NIH, and recently the STW Nutrall Grant, nutrition-based approach to support antigen-specific oral immunotherapy for food allergy and the RAAKPRO DiAgRaMs Grant, validate exercise as challenge model to test health products on intestinal condition and immune system.



Michele Gerbrands, age: 45, Educational Background: Computer science (ing.) Post-Graduate Certificate in Education (PGCE), Master Media Innovation (finishing thesis). My main goal is to empower young people and help them get the best out of themselves. My instruments are my ability to think in educational- and technological enhanced ideas where win-win situations, building bridges, learning by doing and technology are important foundational components. Currently I am working at the department of Biomedical Sciences at the University Medical Center Utrecht. I am experimenting with technology enhanced educational concepts; to focus I have organized challenges to involve students in the development of these concepts. Currently I am busy with the co-challenge, a two week elective

challenge where bachelor and master students from all faculties of the university Utrecht develop a concept for the municipality of Utrecht based on real-world problems. Along the way students can develop professional skills such as pitching, networking, reflection, communication and project management. My goal is to scale up the challenge concept and make it available for a broader group of (international) students so they can work in multidisciplinary teams with students from different educational levels and develop concepts for real-world problems in co-operation with professionals from the educational and corporate world. Another passion is to help students reflect on personal collected data to create awareness on stress with the aid of technology (Quantified Self).

About the speakers and moderators



Brian Goeltzenleuchter, MFA - Artist, writer, and educator
Brian Goeltzenleuchter was born in San Diego in 1976. Through an artistic practice that uses analog and digital technologies to mediate the senses of sight, sound, touch, and smell, Goeltzenleuchter designs situations which explore the dynamics between individuals and the cities and institutions which shape those relationships. Goeltzenleuchter's interactive art has been critically celebrated for expanding the olfactory potential for transmedia storytelling. He earned his MFA in 2001 at UC San Diego. From 2002 - 2008 he was Associate Professor and Director of MFA Studies in Art at Central Washington University. He has held residencies at the Institute for Art and Olfaction, Los Angeles, Banff Centre, Canada, and Centrum Beeldende Kunst, The Netherlands.

He is Faculty Fellow in the Weber Honors College and Research Fellow at the Institute for Public and Urban Affairs, San Diego State University.

Selected exhibitions and performances include: Volatile!, The Poetry Foundation, Chicago (2015); Sillage, Santa Monica Museum of Art (2014); Adaptive Equipment, Lust Gallery, Vienna, Austria (2011); c (pronounced /k/) Wellness Centre, Southern Alberta Art Gallery, Canada (2010); c Boutique, Museum of Contemporary Art, San Diego (2010); Sponge X Sponge, Colorado State University (2007); Institutional Wellbeing, Centrum Beeldende Kunst, The Netherlands (2006); Who's not for sale, Banff Centre, Canada (2006).



Dr. Gomez-Ospina was born and raised in Medellin, Colombia. She double majored at the University of Colorado Boulder, completing her bachelor's degree in Molecular Cellular and Developmental Biology as well as Biochemistry. She graduated summa cum laude and wrote an honors thesis entitled "Role of the quiescent center in the regeneration of the root cap in Zea Mays." She then completed her combined MD, Ph.D. at Stanford Medical School, where her Ph.D. work focused on understanding the novel functions of voltage-gated calcium channels. Her Ph.D. thesis, "The calcium channel CACNA1C gene: multiple proteins, diverse functions," was published in Cell and PLOSone. After completion of her dual degrees, she completed residency in Medical Genetics at Stanford Hospital and clinics.

Her post-doctoral research was with Dr. Matthew Porteus where she began to develop genome editing-based strategies in stem cells as therapies for metabolic diseases. She is an assistant professor in the Division of Medical Genetics at Stanford University. For her clinical practice, she sees patients with suspected genetic disorders and is also in charge of the enzyme replacement service for lysosomal storage disorders at Lucile Packard Children's hospital. She has been the lead author in research studies in The New England Journal of Medicine, Cell, Nature Communications, American Journal of Medical Genetics, and others

About the speakers and moderators



Dr. Gianfranco Grompone is a senior scientist and team manager delivering high impact product solutions in a competitive global market by combining strong academic basic science background to industrial experience. Dr Grompone's research interests include: microbiome and probiotics, nutrition and health, functional foods, prebiotics and symbiotics, microbiome-driven products and innovation, personalized nutrition, translational medicine and biotechnology. To date, he has developed solid networks and public-private partnerships worldwide, with a special focus in Latin America. He has been involved in science & technology prospective policies and innovation strategies in Latin American countries as a consultant. He has recently developed a science popularization national radio broadcasting program in Uruguay, with a strong focus on microbiome related topics. He is a member of the Harvard Kennedy School Executive Education Alumni network.

Dr. Grompone got his agronomic engineer diploma at ENSAR (Ecole Nationale Supérieure Agronomique de Rennes, France) in 1999. After his PhD (1999-2002) at Pr. Dusko Ehrlich's lab (INRA Jouy en Josas, France) where he focused on the role of homologous recombination in the replication of the

chromosome of *E. coli*, he worked as a postdoc (2002-2005) at Pr. Philippe Sansonetti's lab (Institut Pasteur, Paris, France), focusing on the early step of *Shigella flexneri* entry into intestinal epithelial cells. He then moved to Danone Research (Palaiseau, France) where he worked within the R&D Department for 10 years (2005-2015), focusing on the selection, functional characterization, preclinical validation and clinical development of new probiotic strains for the dairy division. From 2014 to 2016 he directed the microbiome program at Bioaster, a new public-private Technology Research Institute co-founded by Danone Research, Institut Mérieux, Sanofi Pasteur, CNRS, INSERM, CEA, Institut Pasteur and Lyonbiopôle. He was the head of the biobusiness and IP direction at National Institute of Agronomic Research in Uruguay from 2016 to 2018. Since May 2018, he joined Lesaffre International R&D Corporate team in Lille, France to work as a Discovery Nutrition and Health Science leader with high focus on microbiome driven new products and bioactive molecules screening.

More info here: <https://www.linkedin.com/pub/gianfranco-grompone/a/b00/90a>



Dr. Janet P. Hafler is Associate Dean for Educational Scholarship and a Professor of Pediatrics at the Yale School of Medicine. Dr. Hafler's responsibilities as Director of the Yale School of Medicine Teaching and Learning Center (TLC) include overseeing three areas in medical education: assessment of students, the curriculum, as well as educators; educator development programs, and educational technology.

Dr. Hafler received her master's degree in education specializing in maternal and child health from Columbia University and her doctorate in Education from Harvard University. She focuses on assisting faculty, students, and residents to explore innovative ways to effectively promote learning in both the classroom and the clinical settings. Promoting, influencing and nurturing a climate in which physicians, residents and students can teach — and learn — has been foremost among her career objectives. Through the TLC, Dr. Hafler directs the Medical Education Fellowship

for faculty educators as well as a Masters Degree in Medical Education and Medical Education Elective courses for both medical students, residents, and faculty. She also collaborates with YNHH residency programs in offering resident-as-teacher programs for all residents.

Dr. Hafler runs an active research program applying qualitative research methods in medical education. She collaborates with and mentors clinicians and faculty on the elements of qualitative research in the field of medical education and medical care. In turn, mentored faculty members have learned to develop and demonstrate the tools necessary to effectively teach and lead others. Dr. Hafler is very widely published with book chapters, curriculum materials and original articles in medical education and clinical journals. She frequently serves as visiting professor internationally and has been invited to present regularly at regional and national professional meetings.

About the speakers and moderators



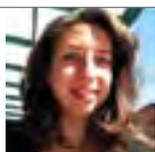
Bert van de Heijning (MSc, PhD) works since 2006 as Principal Scientist within Danone Nutricia Research. His main fields of interest and expertise are nutrition and metabolism, in particular digestive physiology and gut biology; by training he is a zoologist and neuroendocrinologist. After an MSc in Biology at Wageningen University (NL), he obtained his PhD degree at the Rudolf Magnus Institute for Neurosciences of Utrecht University (NL). After a postdoc in the

Gastroenterology dept. of the Utrecht Medical School, and a post-doc in Dairy science in Ede (NL), he was assistant professor at Wageningen University (NL), lecturing animal physiology, and supervising graduate and PhD-students. His educational program included traineeships at the Cambridge University (UK) and McGill University in Montreal (Canada).



Roos de Jonge (PhD) was trained as a Medical Biologist and obtained her PhD in neurogenetics at AMC, Amsterdam, The Netherlands. After a year of postdoctoral fellowship at the Silvius Laboratorium in Leiden, she decided to quit basic science and study philosophy at UvA, the Netherlands. She aimed for a job in science education or journalism but ended up as the scientific coordinator at Prinses Beatrix Foundation, a big charity foundation specialized in muscle and motor

neuron diseases. In 2006 her daughter was born with a severe congenital heart defect and forced her to switch to Duchenne Parent Project which was at walking distance of her house. She started combining the care for her daughter with patient advocacy and got involved in patient participation at Stichting Kind&Ziekenhuis. Nowadays works as Advisor Patient Participation in education at the UMCUtrecht combining her personal experience with training.



Farah Kools (MSc) is a PhD candidate at UMC Utrecht. She is passionate about the Life Science sector and focusses on ways to bridge the gap between bench and bedside and raise awareness about reducing research waste. Farah has a background in Biomedical Sciences at Utrecht University

where she did research in the fields of Metabolic Diseases, Regenerative Medicine, and Oncology, completing her Master internship at Massachusetts General Hospital, a teaching hospital of Harvard Medical School in Boston.

About the speakers and moderators



Belinda van't Land (PhD) is a Sr. Scientist within Nutricia Research and affiliated to the Wilhelmina's Children's Hospital, UMC Utrecht. She currently leads a cross-functional research team (consisting of a Post-doc, 3 PhD students and a Sr. Assistant Scientist) studying the complex interplay between nutrition and immunological development in early life. She obtained her PhD at the Radboud University of Nijmegen which focused on the immunopathology involved in mucosal barrier injury with the impact of nutrition as key

study aspect. With increasing interest in immunological challenges and the passion for translational research she took the role as scientist within Nutricia Research and performed clinical as well as preclinical research leading to a fast amount of publications, patents as well as granted research collaborations. With the passion for early life immune development and believe that nutrition can make the difference she is dedicated to increase the translational capacity of current research collaboration.



Ingrid Lether (MSc) Manager Research and Innovation, Reumafonds studied biology at Utrecht University and obtaining her Master's degree in 1987. She has worked for several pharmaceutical companies, being involved in phase I-III clinical research. In 2001 she joined the Dutch Arthritis Foundation as manager Research and Innovation. In this

function she has developed the current grant procedures (on project grants, program grants, fellowships, and on international collaborations and consortia) and research policy of the DAF. The DAF is actively bringing (international) researchers and funders together, with the aim to help bring forward translational research into arthritis.



Jorg van Loosdregt (1981) obtained his PhD at the Molecular Immunology laboratory, University Medical Center Utrecht, The Netherlands. Here, he studied the regulation of the transcription factor FOXP3, which is crucial for both the differentiation and function of regulatory T cells, and therefore for maintaining immune homeostasis. After completing his PhD program in 2011 (cum laude) Jorg moved to the Department of Translational Research, at the Sanford-Burnham Medical Institute in San Diego, USA, on a fellowship from the Dutch Arthritis Foundation. In San Diego he investigated the role of autophagy in orchestrating effector T

cell responses, with a focus on rheumatoid arthritis. In December 2013, van Loosdregt returned to Utrecht (supported by a VENI fellowship) to focus on the molecular and epigenetic pathways that are deregulated in autoimmune diseases. At the beginning of 2017, Jorg moved to the laboratory of translational immunology (LTI) to form a research group together with pediatric clinician/researcher Bas Vastert. The van Loosdregt-Vastert group is dedicated to perform both fundamental and clinical research with the aim to develop novel therapeutic strategies to treat autoimmune diseases such as juvenile idiopathic arthritis.

About the speakers and moderators



Dr. Madhvi Menon is a Postdoctoral Research Fellow at Harvard Medical School. Her research interests include translational immunology and the identification of novel drug targets for improved management of immune-mediated disorders. She is currently investigating the inflammatory mechanisms contributing to age-related macular degeneration, one of the leading causes of visual loss in people over the age of 60. Prior to this, Dr Menon worked at University College London, where she studied the mechanisms that underlie concurrent inflammation in the gut and the joint, using mouse models of arthritis. This work was particularly relevant in understanding the mechanisms surrounding development of arthritis in patients with inflammatory bowel disease (IBD). Dr Menon obtained her

PhD in Immunology in 2015 from University College London. During her PhD, she discovered a novel crosstalk between plasmacytoid dendritic cells and B cells in healthy individuals, that was aberrant in patients with systemic lupus erythematosus (SLE). She has recently been awarded grants from Arthritis Research UK and Lupus UK (as co-applicant) to follow-up these findings and assess the clinical utility of IFN α -induced signature to predict response to B cell depletion therapy in SLE patients. Dr Menon was awarded the Bright Sparks in Immunology prize at the BSI/NVVI Congress 2016, and was selected to be a member of the British Society of Immunology Congress Committee in 2017. She attended the 9th Annual International Certificate Program by Eureka Institute in 2017.



Frank Miedema (1954) studied biochemistry at the University of Groningen, specializing in immunology, with a minor in Philosophy of Science. He obtained a PhD from the University of Amsterdam at the Central Laboratory of the Blood Transfusion Service (CLB), now Sanquin. There, from 1983 he was project leader immunovirology of HIV/AIDS as part of the Amsterdam Cohort Studies. In 1996 he was appointed full professor at AMC/University of Amsterdam and in became Director of Sanquin Research in 1998. In 2004 he became head of the Immunology department at the University Medical

Center Utrecht. From 2009 he is dean and vice chairman of the Executive Board at the University Medical Center Utrecht. He is one of the initiators of www.scienceintransition.nl/english. Science in Transition believes that the scientific incentive and reward system is in need of fundamental reform. Next to Science for Science (articles in journals), the added value for society needs to be more appreciation and societal stakeholders should be involved more integrally in the production of knowledge.

About the speakers and moderators



Marc van Mil is associate professor biomedical education at University Medical Center Utrecht, the Netherlands. He cares about and contributes to the professional development of future clinicians, clinician scientists and biomedical scientists; both by being an excellent teacher and a dedicated educational researcher. Marc's background in biotechnology, combined with a PhD in the educational sciences forms a unique and solid basis for his scholarly work within the educational institute of the medical faculty of Utrecht University. His current line of research, entitled 'Eye on Impact', explores educational strategies that help students to cross boundaries between disciplines and broaden their perspective on the societal impact of biomedical innovations.

In his view, education can play a crucial role in helping health care professionals to identify how to contribute to the challenges in translational medicine.

In 2017 Marc was awarded "Higher Education Teacher of the Year" in the Netherlands. The jury praised his efforts to make students aware of the societal impact of biomedical innovations and they applauded his efforts to engage the public in the scientific developments in biomedicine and to raise awareness of the impact of new technologies such as CRISPR/Cas and Next Generation Sequencing. Marc gave many public lectures and participated in talk shows, science festivals, children's TV-shows and YouTube-clips.



Joris van Montfrans (MD, PhD) is a clinician-scientist in the Wilhelmina Childrens Hospital, part of the UMC Utrecht. His clinical work consists of taking care of children with immunodeficiencies and auto-immune diseases. His research focusses on children and adults with primary immunodeficiencies and his team includes 3 PhD students

with special interests in new or improved diagnostic tests, genetics causes of immunodeficiencies, and improved treatments. Joris is active in the national working party for immunodeficiencies (secretary) and in the ESID registry steering committee. Other activities: he is part time interior designer (for modern houses).



Gerard Pasterkamp (MD, PhD) is Professor of Experimental Cardiology and laboratory of clinical chemistry, UMC Utrecht. The laboratory houses 60 researchers and technicians that cover a broad range of activities: biomarker discovery in cardiovascular research, large animal drug testing and thrombosis and hemostasis. His research interests are in the field of cardiovascular biology and more specifically innovation in biomarkers and drug targets. The research group houses the largest atherosclerotic plaque biobank worldwide: Arhero Express including >4000 patients This biobank has generated new insights into determinants of plaque destabilisation. For example, it has been demonstrated that local plaque characteristics are strongly associated with long term outcome but also that plaque characteristics have rapidly changed in the last decade. The laboratory now invests in the excavation of genetic determinants of atherosclerotic

plaque characteristics. Cells (cohort of 700 patients where all cell fractions have been isolated) and Aneurysm Express. Private public research projects are one of the main core-activities within the laboratory of experimental cardiology. In the UMC Utrecht he is a member of the focus theme "Innovation and Valorisation". Recently he initiated with 6 other founders from 3 Universities an inter-academic office that will act as a science broker specialized in the field of cardiovascular biomarkers and drug targets (www.cardiolaborate.org). Within the laboratories spin off activities are stimulated. He is co-founder of the biomarker company CAVADIS and another spin off from the group is ENCARE. The company ENCARE is currently executing the last pig studies to test a biological entity that prevents heart failure after myocardial infarction before entering in studies in humans.

About the speakers and moderators



Berent Prakken (MD, PhD) is vice-dean and director of the biomedical education centre at the Utrecht Medical Center Utrecht (UMC Utrecht), the Netherlands. He is also professor of pediatric immunology at the UMC Utrecht and honorary professor at the University of Ghent, Belgium. Berent Prakken has built a translational research lab that focused on regulation of inflammation and biomarker development in human in inflammatory diseases. He received numerous national and international awards and grants for his work. The work of his group is published in all major international journals, including Nature Medicine, PNAS, Immunity, the Lancet, JCI and in various Nature journals. Over the years he successfully mentored more than 40 PhD students. Prakken serves in various national and international research advisory boards and was member of the Dutch National Health Council

(‘Gezondheidsraad’). He was vice-chair of Medical Ethical Review Board (IRB) of the UMC Utrecht. Berent Prakken is president of the Pediatric Rheumatology European Society (PRES) and member of the EULAR executive committee. He is member of the steering committee of UCAN (international federation facilitating biological research in arthritis) and has set up the first international platform for biological studies in arthritis (UCAN-U, www.ucan-u.org). Berent Prakken’s personal commitment is to training & education and to improve the impact of science. Unconventional thinking, collaboration and crossing boundaries inspire him, just as his close friendship with Salvo Albani, Norm Rosenblum and the other board members of Eureka. As co-founder and board member he enjoys the journey on which Eureka is taking them.



Annet van Royen-Kerkhof (MD, PhD) is paediatrician-immunologist/rheumatologist, and Head of the Department of Pediatric Immunology, Rheumatology, Infectiology, Hematology and StemCell Transplantation of the Wilhelmina Children’s Hospital, University Medical Centre Utrecht (UMC Utrecht). Her clinical work, focussing on pediatric systemic autoimmune disease, mainly juvenile dermatomyositis (JDM), is closely interrelated with fundamental research from the Laboratory of Translational Immunology of the UMC Utrecht,

and the Child Development & Exercise Center of the UMC Utrecht. Her fields of interest are development of biomarkers (e.g. galactine-9) to assess disease activity in JDM, and development of training programs to increase physical activity in children with musculoskeletal inflammation. Dr van Royen and co-workers actively contribute to research projects of centers for JDM worldwide. In addition, Dr van Royen-Kerkhof is Program Director of the Medical Research Master SUMMA, a program to train clinician-scientists.



Hester den Ruijter (PhD) I am a translational scientist at the Laboratory of Experimental Cardiology in the University Medical Center Utrecht. My research focusses on sex differences in cardiovascular diseases. I have been trained in fundamental research as well as in clinical epidemiology. Currently, I coordinate the Dutch Heart Foundation funded consortium Queen of Hearts, a consortium that works on biomarker discovery-a clinical test- to improve the diagnosis of cardiovascular disease in women. One of our challenges is

how to involve stakeholders in the process of translating fundamental knowledge to the patient. Next to my scientific career, I value the communication towards our society and am an active member of Women Inc, an organization that raises national awareness that important sex differences in medical research and care are currently neglected.

About the speakers and moderators



Salmaan Sana

Salmaan's speciality is in healthcare leadership, change and compassion. He is a creative program designer, facilitator and coach. Starting as active medical student at the VUmc medical centre in Amsterdam, he initiated many projects on leadership and development, and has been very involved in (Medical) Education. In 2008 he started the international "Leadership Summer School" (<http://leadershipsummerschool.org>), in 2011 he started a foundation together with other healthcare professionals on Compassionate Healthcare (<http://www.compassionforcare.com/en/>). This especially lifted off after taking the stage at TEDxMaastricht (<https://www.youtube.com/watch?v=UxaT-Yx-Qds4>). He was co-initiated and help run leadership programmes for healthcare professionals (<http://humansofhealth.com>). Salmaan was appointed to be the first 'chief compassionate officer' in an academic hospital giving him the chance to research ways to cultivate compassion on an individual, departmental and institutional level. Being an entrepreneur, Salmaan also started a company in 2011 with one of his friends focusing on bridging the offline and online worlds, which later on became "Nameshapers" (www.nameshapers.com). After having worked for his foundation, his company, and being involved with a series of different events & initiatives, he decided to work on having more of a social impact, and learning how to create meaningful learning experiences. For the past 3 years he has been working for Better Future (www.better-future.com) continuing his passion for guiding organisations, consulting and enabling change agents. Currently, he is a forerunner on bringing about awareness and designing programs to help

teach and guide medical professionals on 'Medical and Compassionate Leadership'. Currently running programs in hospitals on what medical leadership is, what the most important topics are and what steps to take so that each person takes responsibility and ownership for the change that is needed. With the current burn out rate being so high within healthcare professionals, Salmaan has been focusing on getting the very same professionals to have more influence on their work setting and turn down the dropout rate. He helps them develop their personal leadership and in all aspects of the word, become 'healthy' healthcare professionals. For medical residents he runs a 10 month program called "Gamechangers in Health" where the participants learn how to become a change agents and tangibly shift things in their environment. At Better Future, Salmaan works very broadly with Healthcare institutes and faculties. He guides teams and organisations in becoming strategically purpose driven and getting the best out of everyone utilising intrinsic incentives and motivation. He enjoys enabling human potential and catalysing creativity. He works on ways of connecting social impact, personal leadership and team building. A part of his work also includes working with the largest health NGO in Africa, Amref Health Africa (www.amref.org). On any other day, you can find him living in the South of Amsterdam, using his bike to get around the city, building some consistency in practising cross-fit, and dabbling in different kinds of writing. For more information, go to his LinkedIn profile www.linkedin.com/in/salmaansana and find him widely on other social media platforms.



Casper Schoemaker (PhD) is a senior researcher and project leader at the National Institute for Public Health and the Environment (RIVM), the Netherlands. Furthermore, he is an advisor on patient participation in research at the Wilhelmina Children's Hospital (UMC Utrecht). He is the father of a JIA patient, and a lung patient himself. Casper represents the Dutch JIA Patient and Parent Association in several research projects, and in the Dutch JIA-guideline panel. This year, he will lead a national priority setting partnership to establish a research agenda for JIA, following the James Lind Alliance

method. As a member of the Scientific Advisory Board of the Lung Foundation of the Netherlands, he appraises research proposals from a patient perspective. In the process of patient involvement and engagement he can build on his research-experience with stakeholder participation in the Dutch Public Health Status and Forecast 2014 report. He was a member of the editorial board of the leading Dutch mental health journal, which included patients. In these years he experienced how patients can make a valid and valued contribution to improve the relevance of research.

About the speakers and moderators



Vicki Seyfert-Margolis (PhD) founded My Own Med in January 2013, based on over two years of work on a database, web and mobile application platform technology for family based co-management of health. Previously, Dr. Seyfert-Margolis was the Senior Advisor for Science Innovation and Policy in the Office of the Commissioner of the US Food and Drug Administration. While at the FDA, she oversaw the development and execution of an agency wide strategic plan for regulatory science. Prior to the FDA, she served as Chief Scientific Officer at the Immune Tolerance Network (ITN), a non-profit consortium of researchers seeking new treatments for diseases of the immune system. At ITN, Dr. Seyfert-Margolis oversaw the development of over 20 leading edge assay development and centralized laboratory facilities, bringing

them to GLP and CLIA compliance. She designed and implemented biomarker discovery studies for over 25 Phase II clinical trials across a broad array of immunologically mediated diseases including autoimmune disorders, allergy, and solid organ transplantation. Prior to this, she served as Director of the Office of Innovative Scientific Research Technologies at the National Institute of Allergy and Infectious Diseases at NIH, where she worked to integrate emerging technologies into existing immunology and infectious disease programs. Dr. Seyfert-Margolis completed her PhD in immunology at the University of Pennsylvania's School of Medicine, and her post-doctoral fellowship work at Harvard University and the National Cancer Institute.



Anna van Suchtelen (New York 1961) studied Literature (MA) in Groningen, the Netherlands and Visual Arts at University of California San Diego, USA. She is an artist and a writer. Text and narrative play a crucial role in her visual work, which includes installations, performances, printmaking, audio works and film. Her projects, often context-specific and interactive, explore the senses, memory and time. Her work has been exhibited, performed and screened in the Netherlands, the United States, Canada, Italy, India and Japan.

Selected art projects include: Genius Loci (2017), ← → and 0 degrees (2015) for Dapiran Art Project Space; Pioneer Pop (2014) for Pavillion pOp/AORTA; Pilgrim Kootwijk (2013-12) for Green Wavelength/Radio Kootwijk; Our Airs Conspire (2013) for The Greenhouse/Kunstuitleen, nominated by K.F. Hein Art Stipendium; Lindenduft (2010) for K.F. Hein Foundation; Soft Voices (2009) for Kunstsporen Foundation/University Museum/Museum Boerhaave. Selected writing projects include: articles, reviews and columns for Art Platform Lucy (2017-11); novel Versailles at the Scheldt for Cossee Publishers (2017).

About the speakers and moderators



Dr. Tedesco Tedesco is a clinician-scientist with a special interest in muscle regeneration. He graduated in Medicine and Surgery with honours at the University of Rome "La Sapienza" (Italy). He then continued his studies at San Raffaele Scientific Institute (Milan, Italy), where he obtained his PhD in 2010 studying novel gene and cell therapy strategies for muscular dystrophy. After his PhD, he coupled post-doctoral research and clinical training between Italy (San Raffaele Institute) and UK (UCL and UCL Hospitals). Dr. Tedesco was also a co-investigator in a first-in-human clinical trial based upon donor muscle stem cell transplantation for Duchenne muscular dystrophy. In 2014 Dr Tedesco established his independent group at UCL. He has been invited to present his work to more than 40 international conferences and institutions; he received research several awards and research grants, including an NIHR Academic Clinical Fellowship, the European Society for Gene and Cell Therapy 2015 Young Investigator Award and, more recently, a European Research Council (ERC) Starting

Grant. The Tedesco lab focuses on the study of skeletal muscle stem cells and regeneration, and on the development of novel experimental therapies for muscle disorders. Their work pioneered the use human artificial chromosomes for gene therapy (Tedesco FS et al., *Sci Transl Med* 2011; Benedetti S et al., *EMBO Mol Med* 2017). They were also amongst the first to report on the therapeutic potential of patient-specific, genetically-corrected muscular dystrophy iPS cells (Tedesco FS et al., *Sci Transl Med* 2012; Maffioletti SM, Gerli MFM et al., *Nat Protoc* 2015). Current research projects include using human iPS cell-derived myogenesis for disease modelling and tissue engineering (Maffioletti SM, Sarcar S et al., *Cell Rep* 2018) and the use of small molecules to reprogram muscle stem cells for next-generation muscle cell therapies. The overall goal of Dr Tedesco and his team is the clinical translation of these novel regenerative strategies into future therapies for neuromuscular disorders.



Ghislaine van Thiel (PhD) obtained a Master's degree of Health Sciences at Maastricht University. She specialized in Medical Ethics and Philosophy of Science. Currently she is Associate Professor at the Julius Center for Health Sciences and Primary Care of the UMC Utrecht. Her main research

topics are ethics of drug regulation and development, and clinical ethics. Ghislaine is a member of the Dutch Health Council, a chair of the Medical Research Ethics committee at the UMC Utrecht and she teaches medical ethics at the Faculty of Medicine.



Eureka alumnus **Bas Vastert (MD, PhD)** is a pediatric rheumatologist in the Wilhelmina Children's Hospital Utrecht. He obtained his PhD on mechanisms of disease and therapy in severe Juvenile Idiopathic Arthritis in 2013. From 2013, he started a translational research line in the laboratory of translational immunology and from March 2017 he is coheading the v Loosdregt-Vastert group within the Laboratory of Translational Immunology in UMC Utrecht, focusing on novel therapeutic strategies in JIA through translation of cutting edge basic science into clinical benefit. He is currently leading a multi-center prospective trial

implementing a biomarker driven stop-strategy for rIL-1RA therapy in systemic JIA in the Netherlands and setting up a clinical trial studying the potential of Nicotinamide (vitamin B3) in therapeutic strategies for non-systemic JIA. In 2016 he organized, together with EUREKA alumnus Klaus Tenbrock ((Aachen, Germany) a fund raising bicycling tour, from Utrecht (Netherlands) to Genua (Italy). The UCAN Ride for Arthritis (UCANR4A.eu) boosted international research collaboration, raised > 30 000 euro on private donations and received major media attention (local as well as national) in the Netherlands, Germany, Switzerland and Italy

About the speakers and moderators



Lucy Wedderburn (MD, PhD) is Professor of Paediatric Rheumatology, UCL GOS Institute of Child Health, University College London. My research interests are T cell immunology, immune regulation and muscle biology. I am Director of the Arthritis Research UK Centre for Adolescent Rheumatology, a partnership between UCL, GOSH and UCLH which aims to promote and develop research in Adolescent Rheumatology.

Childhood arthritis has proved an excellent model in which to study the balance between activation and regulation in the immune system. In myositis through our UK wide cohort and biomarker study we have changed the way that biopsy and autoantibody information is used to personalise care. I now lead an exciting new initiative to deliver personalised treatment strategies to children with arthritis called CLUSTER .



Hilde De Winter (MD) is sr. medical director at Ablynx, a Belgian biotech company, and is the medical lead on the the anti-vWF Nanobody caplacizumab program in acquired TTP. Hilde has more than 10 years of experience in clinical development and medical affairs in affiliate, regional and global roles at Amgen, OncoMethylome and Innogenetics.

Most recently, Hilde was intl. development medical director, European medical lead for inflammation pipeline products at Amgen. Hilde obtained her MD degree at the University of Ghent, Belgium. She is board-certified in internal medicine, and conducted postdoctoral research training in immunology at the La Jolla Institute for Allergy and Immunology.



Nico Wulffraat (MD, PhD) is professor of pediatric Rheumatology and chair Research and Education at the department of pediatrics, University Medical Center, Utrecht, The Netherlands. He obtained his MD and PhD (1987) at the Free University Hospital Amsterdam. He was trained as a pediatrician from 1988 until 1993 in Utrecht. He was fellow pediatric immunology and rheumatology from 1993 to 1995 in the WKZ. Since 1995 he worked as a consultant in pediatric immunology-rheumatology. Since 2010 he is the head of this subunit. From 1997-2004 he was also coordinator of the pediatric allogeneic and autologous stem cell transplantations for immune deficiencies, metabolic disorders and autoimmune diseases. Field of Study in Pediatric Rheumatology are interventions in the regulation of chronic inflammation (medication, immunisation and cellular therapies). He is PI of several investigator initiated trials of immunisations in children with rheumatic diseases including

MMR, HPV and Men C, prevention of MTX side effects, and application of Mesenchymal Stem cells in refractory GvHD and JIA. He is coordinator of a FP7 consortium for pharmacovigilance of biologics used in JIA (PHARMACHILD). Also He leads the EHC project SHARE that aims at documenting standards of care and treatment recommendations for pediatric rheumatic diseases throughout Europe. Past memberships are Board of Dutch pediatric rheumatology society, Scientific Advisory Council of the Dutch League for Rheumatology, ZONMW programme committee Translational Adult Stem cell research, ZONMW programme committee Priority medicines for Children, European Medicines Agency (EMA) expert group for Pediatric rheumatology. Currently he is council member of PRES and PRINTO. Dr Wulffraat has co-authored over 240 Pubmed cited papers in international journals on pediatric rheumatology and immunology and 12 chapters in books. Hirsch index is 44.

Observer biographies



Colby Benari has over a decade of experience supporting biomedical researchers to find mentors, win funding and develop their careers. As Head of the Academic Careers Office, University College London, Colby is responsible for developing the careers of over 5,000 graduate students and many more

postdoctoral biomedical researchers through innovative and impactful programmes. Colby has previously managed research funding schemes and mentoring schemes for Cancer Research UK and the UK Academy of Medical Sciences.



Markus Maeurer MD PhD FRCP

Markus Maeurer studied medicine at the Johannes Gutenberg University in Mainz and the University Hospital in Zurich, received his MD registration 1989, the ECFMG (USA), in 1990 and earned his PhD summa cum laude with a thesis about complement and autoimmune responses at the Johannes Gutenberg University Mainz. He was a postdoc at the Dept of Medical Microbiology 1989-92, then at UPMC (Pittsburgh, PA, USA) at the Dept of Surgical Oncology 1992-1994, then visiting Prof at UPMC, board-certified 1996 as a specialist in Medical Microbiology in Mainz, Germany and served there till 1997 as a PI in infectious disease research. Associate Prof 1998; full professor 1999 at the Univ of Mainz; 2000-2004 Vice Dir of the Diagnostic Laboratories. 2005-2012 Prof at the Microbiology and Tumor cell Biology Center (MTC) at Karolinska Stockholm

and attending physician for clinical immunology at the national center for infectious disease control in Stockholm, Sweden. 2012-2017 Senior Physician at CAST (Center for allogeneic stem cell transplantation) at the Karolinska Hospital and Dir of the Div Therapeutic Immunology, Karolinska Institute, Stockholm, Sweden. 2018 Dir of the Immunotherapy programme of the Champalimaud foundation, Lisbon, Portugal and Co-Dir of the Immunotherapy Program at the KHNW, Frankfurt, Germany. Dr. Maeurer has authored more than 280 scientific published manuscripts and 13 bookchapters, he reviews grant applications for several countries/agencies as well as scientific manuscripts for scientific journals. His main interests are HDT (host directed therapies with an emphasis on T-cell responses) to achieve better clinical outcome for patients with infections or with cancer.