EUREKA Institute

International Certificate Program
May 3rd - May 9th 2015
Siracusa, Italy
The Three Pillars
The Eureka educational initiative is based on:
- an attitude of teamwork
- critical thinking skills
- knowledge of translational medicine

Eureka’s mission
The Institute’s mission is to develop a community of translational medicine professionals equipped to catalyze the application of discoveries for the benefit of human health. We do this by educating and building a community.

Overall Educational Objectives
Participants in the Certificate Program will:
1. Analyze the business, scientific and regulatory aspects of Translational Medicine (TM)
2. Explore the challenges professionals encounter in TM
3. Develop critical thinking skills to approach the challenges in Translational Medicine
4. Develop communication skills for presenting various topics to a broad spectrum of people
5. Analyze effective manuscript preparation and begin to apply the concepts to their own work

Educational Strategies
We use a number of educational strategies to achieve the overall course objectives and the goals of each individual activity. Key among these is creating an open and safe environment through which participants can navigate, and in which participants may interact.
Support

We thank the kind support of the Stanford University – Child Health Research Institute, ROCHE (F. Hoffmann-La Roche Ltd), Danone Center for Specialised Nutrition, the University of Arizona – Parent Project Muscular Dystrophy and Molecular Cardiovascular Research Program, RUSH University Medical Center, EUTRAIN (EUropean Transport Research Area INternational Cooperation Activities), Nature Medicine, Nature Medicine Biotechnology, the University College London, University Medical Center Utrecht – Child Health Program, Singapore Health Services, Duke–NUS Graduate Medical School, and the University Medical Center Utrecht.

We deeply appreciate the Faculties for the 2015 International Certificate Program. They are generously donating their time and expertise to participate in the course. Our sincere gratitude goes to Julia Ong, who provides energy and cohesion to this Program. We want to recognize the dedicated effort and commitment of the Acute Frog Consulting team, Daria Pierotti and Bob Chinello. We thank Erica Roks for her contributions. In addition, we thank our Artists-in-Residence Anna van Suchtelen and Brian Goetzenleuchter for contributing their time and passion in cultivating the 2015 Translational Creativity program.

Lastly, we thank Francesco Italia, Vittorio di Natale, and their colleagues at the Borgia del Casale for their extraordinary efforts, gastronomic artistry, and for the beautiful space in which the course is held.

Eureka Board Directors 2015: Salvo Albani, David Hafler, Janet Hafler, Juan Carlos Lopez, Berent Prakken, Norm Rosenblum, and Vicki Seyfert-Margolis.
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. A simple Pubmed search on “translational medicine” generates over 29,000 papers, while a Google search yields nearly 9,000,000 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.

Course Venue

Most of the lectures, case studies and mentoring sessions will be held at the Borgia del Casale, located in the Piazza Duomo in the heart of Ortigia.

Address:
At Borgia del Casale, Via Picherali 10, Stairs B, Interno 4 (off the piazza Duomo) Siracusa.

Rooms dedicated for the conference:
Salotto dei Viaggiatori
Salotto delle Artri
Alcova
Stanza degli specchi

Lunches and the opening and closing dinner will be held in the Dehor, and the Dammusi.

In the event that you need to contact the venue:
Telephone: +39 0931 22509
Mobile: +39 335 256201 and +39 339 548804

About the Program

You will find in the following pages:
- a brief introduction to Eureka and Translational Medicine
- basic logistical information
- course materials organized by day
- faculty, artists’ and participants’ bios

This is a living document that will grow and change with you as you move through the course. Because we focus on active participation rather than passive processes, the program will be tailored to your needs and expectations, both the ones pre-defined and those that arise in situ. The program materials are organized chronologically. For each session, you will find an abstract as well as its principal learning objectives. Each day will start at 8:15 with coffee and brief social period, which will segue into the first session of the day (at 8.30 AM). “The course is balanced between didactic sessions, interactive discussion, and practical application. Please make opportunities to synthesize the discussions and explore, in a personal context, how the topics covered can be applied to your own work. Evaluation of the course is an important part of reflecting on the experience and providing feedback aimed at course improvement. You will be provided with an e-based evaluation that can be completed on an ongoing basis throughout the course and should be submitted by the end of the course.”
Eureka Faculty Roster - May 2015

Salvatore Albani, M.D., Ph.D., Professor, Duke-NUS Graduate Medical School, Director, SingHealth Translational Immunology and Inflammation Centre, UCAN-A Chair

Jeffrey Beekman, Ph.D., Associate Professor, Department of Paediatric Pulmonology/Immunology, Centre for Molecular and Cellular Intervention, University Medical Centre Utrecht

Sylvia Brugman, Ph.D., Senior Postdoc, Cell Biology and Immunology group, Wageningen University; E-course developer, Eureka Institute

Roberto Chinello, M.B.A., B.S. Economics, Acute Frog Consulting

Derek Colla, B.Sc., J.D., Associate, Cooley Business Department and a member of the Emerging Companies practice group

Richard Foty MSc., Ph.D Candidate, Curriculum and Networks Coordinator, Translational Research Program in Health Science, Institute of Medical Science

Dirk Elewaut, M.D., Ph.D., Professor of Rheumatology and Immunology; Head, Laboratory for Molecular Immunology and Inflammation; Division of Rheumatology, a EULAR and FOCIS Center of Excellence; Ghent University Hospital

Patricia Furlong, R.N., B.S., M.S., Founding President, Parent Project Muscular Dystrophy (PPMD)

Carol Gregorio, Ph.D., Professor of Cell Biology and Anatomy, and Molecular and Cellular Biology; Member, BIOS Institute; Director, Molecular Cardiovascular Research

David Hafler, M.D., Chief and Chair of Neurology, Yale New Haven Hospital and Yale School of Medicine

Janet Hafler, Ed.D., Professor of Pediatrics, Director of the Teaching and Learning Center and Associate Dean for Educational Scholarship, Yale School of Medicine

Matthias von Herrath, M.D., Professor and Member with Tenure at the La Jolla Institute for Allergy and Immunology

Paul Krieg, Ph.D., Professor of Cell Biology and Anatomy and Molecular and Cellular Biology, The University of Arizona

Ingrid Lether, M.Sc., Manager of Research and Innovation, Dutch Arthritis Foundations

Juan Carlos Lopez, Ph.D., Head of Academic Relations and Collaborations at Hoffmann-La Roche

Andrew Marshall, Ph.D., Editor-in-Chief, Nature Biotechnology

Patrick Maxwell, FMed-Sci, Regius Professor of Physic & Head of the School of Clinical Medi-cine, University of Cambridge

Frank Miedema, Ph.D., Dean and Vice Chairman of the Board and professor of Immunology, University Medical Centre Utrecht, the Netherlands

Kenneth A. Oye, BA, MA, Ph.D., Associate Professor of Political Science and Engineering System and Director of the Program on Emerging Technologies (PoET), Massachusetts Institute Technology

Daria Pierotti, BSc., MSc., Cpsychol., Senior Consultant, Acute Frog Consulting

John Porter, Ph.D., Chief Executive Officer, Parent Project Muscular Dystrophy (PPMD)

Berent Prakken, M.D., Ph.D., Associate Professor of Pediatric Immunology, University Medical Centre Utrecht; Co-Chair, UCAN-U; Chair, EUTRAIN

Norm Rosenblum, M.D., Professor of Paediatrics, Canada Research Chair in Developmental Nephrology, and Associate Dean, Physician Scientist Training, University of Toronto

Maria Grazia Roncarolo, M.D., George D. Smith Professor of Pediatrics and Medicine, Division Chief, Pediatric Stem Cell Transplantation and Regenerative Medicine Co-Director, Bass Center for Childhood Cancer and Blood Diseases, Co-Director, Institute for Stem Cell Biology and Regenerative Medicine, Department of Pediatrics, Stanford School of Medicine

Vicki Seyfert-Margolis, Ph.D., Chief Scientific and Strategy Officer, Precision Health Holdings; CEO and Founder, My Own Med

Anita Small, M.Sc., Ed.D., Founder and owner of Small Language Connections

Lucy Wedderburn, M.D., Ph.D., Professor, Paediatric Rheumatology, University College London

Irv Weissman, M.D., Professor of Pathology and Developmental Biology, Director of Standford Institute for Stem Cell Biology and Regenerative medicine and Standord Ludwig Center for Cancer Stem Cell Research and Medicine

Tien Yin Wong, M.D., Ph.D., Provost Chair Professor, National University of Singapore, Vice Dean of Clinical Sciences, Academic Medicine Research Institute and Group Director, Research of Singapore Health Services

Sergio A. Quezada, Ph.D., Immune Regulation and Tumour Immunotherapy Group, GRIK Career Development Fellow, UCL Cancer Institute
Eureka Artists-in-Residence
Anna van Schtelen
Brian Goeltzenleuchter

Eureka Principal Organizers
Salvo Albani
David Hafler
Janet Hafler
Juan Carlos Lopez
Julia Ong
Berent Prakken
Norm Rosenblum
Vicki Seyfert-Margolis

Introduction e-learning module for Translational Medicine
The Eureka course started with an online introduction prior to the face-to-face course in Siracusa in May since 2014 course. The course was developed by Eureka Faculty (coordinated by Juan Carlos Lopez) and Sylvia Brugman, a 2010 Eureka alumnus together with Davey van de Heijden and Renee Filius (both at Elevate health). It was made possible thanks to generous support from EUTRAIN and the Child Health program of the UMCI. Elevate Health is an online academy that educates international health professionals, elevating professional knowledge and improving health worldwide. This online e-learning course (e-course) aims to get everyone up to speed with regards to the definition and components of Translational Medicine before the participants arrive at the face to face course in May.
Sunday, May 3rd

Coffee
Time: 08:15 - 08:30

Welcome & Introductions
Facilitator: Janet P. Hafler
Time: 08:30 - 10:00

Break, 10:00 - 10:15

Mapping Translational Medicine
Presenters: Salvatore Albani and Berent Prakken
Time: 10:15 - 11:30

Abstract
In this session, the objectives of the course and concepts of translational medicine will be introduced and defined.

Objectives
1. Define the field of translational medicine
2. Analyze the components involved
3. Discuss the challenges of translational medicine

Group lunch: 11:30-13:00

Teaching and Learning: Team Building I
Presenter: Janet P. Hafler
Time: 13:00 - 14:00

Abstract
In this session the team building exercise will be discussed. The participants will begin to identify effective group member behaviors and one’s role on a team, in addition to developing a network of colleagues.

Objectives
1. Define what constitutes a team
2. Discuss principles of effective group interaction
3. Discuss networks and their influence on career and science

“Sisyphus”, A Case Study
Facilitator: Norman Rosenblum
Written by: Salvatore Albani and Jessica Colomb
Time: 14:00 - 15:00

Abstract
“Sisyphus” is based on a real case about the development of a novel immunotherapeutic strategy. It focuses on compounds designed specifically for humans. Sisyphus addresses typical problems in proof-of-concept studies, development and regulation. This case also prevents incongruities in animal models of disease versus human application.

Objectives
1. Explore strategies for lead identification
2. Explore strategies for chemistry, manufacturing and controls (CMC) studies (funding and conduct)
3. Explore strategies for safety data in untraditional models

Break, 15:00 - 15:15

Mentoring Session I
Time: 15:15 - 16:15

Abstract and Goals
As part of the course, participants will present a dilemma they are currently facing to a small group of peers. This group will be mentored by faculty. Fellow course participants will act as a consultation group. The objective is to advance personal learning while practicing and improving approaches to, and organization of, problem solving. Reflections using practical real-world problems will anchor the concepts raised in the didactic portion of the program.
Sunday, May 3rd

A Dose of Hope
Presenter: Patricia Furlong
Time: 16:30 - 17:30

Abstract
Patients and family members, when faced with a catastrophic diagnosis (rare or otherwise) feel isolated and alone. The dreams and plans for the life they imagined are gone. Parents with sick children feel as if they have failed parenthood, no longer able to fix things or dry every tear. They have few choices and by default, become an advocate. They search the internet, sign up for Google alerts, connect on FB and Twitter. They join registries. They learn a new language and may travel long distances to find physicians with expertise and interdisciplinary care. They start foundations and form virtual biotech companies. They become caregivers, caretakers, pseudo scientists and doctors, investors and partners. They educate family, extended family, school, community and every physician they will ever meet. They learn a new language, drive regulatory science and healthcare policy. They navigate systems and actively campaign for change. They are aggressive, fearless and effective. They have one single goal – TIME.

Objectives
1. Discuss trajectory of a pediatric rare disease diagnosis
2. Identify opportunities and time points for intervention, support, engagement
3. Discuss the ecosystem of rare diseases and opportunities for partnership between healthcare professionals, researchers, parents/family members and the biopharmaceutical industry

Social Program (Sunday)
Tour of the Borgia del Casale and Opening Dinner
20:00

Please join us to celebrate the 7th Annual International Certificate Program in Translational Medicine. Appetizers precede the dinner. Both will be served at the Borgia del Casale.
Monday, May 4th

Pick Up Time, 08:30AM sharp in Piazza Archimede

Off site team building: Team Building II
Facilitators: Daria Pierotti and Bob Chinello
Logistical Note: Participants will meet in the Piazza Archimedes at 8:30 am EXACTLY on Monday morning. Busses will be waiting to transport participants to the beach where the team building exercise is being held.
Time: 08:30 - 15:00

Abstract
The team building exercise will be led by Bob and Daria, of Acute Frog Consulting and will be comprised of a series of group activities to help the participants to make a better use of their teams by understanding team dynamics and the “social ingredients” of effective interaction.

Objectives
1. Explore the pathway of IP development within an institution
2. Discuss the benefits and detriments of technology transfer
3. Discuss the options, obligations, and strategies of the investigator

Keynote Address “Translating academic discoveries into therapeutics: the CD47 antibody story”
Presenter: Irv Weissman
Time: 18:00 - 19:00

Abstract
Following embryonic development, most of our tissues and organs are continuously regenerated from tissue/organ specific stem cells. The principal property that distinguishes such stem cells from their daughter cells is self-renewal; when stem cells divide they give rise to stem cells (by self-renewal) and progenitors (by differentiation). In most tissues only the primitive stem cells self-renew. Stem cell isolation and transplantation is the basis for regenerative medicine. Self-renewal is dangerous, and therefore strictly regulated. Poorly regulated self-renewal can lead to the genesis of cancer stem cells, the only self-renewing cells in the cancerous tumor. The Weissman lab has followed the progression from hematopoietic stem cells (HSCs) to myelogenous leukemias. They have found that the developing cancer clones progress at the stage of HSCs, until they become fully malignant. At this point, the “leukemia” stem cell moves to a stage of a downstream oligolineage or multilineage progenitor that has evaded programmed cell death and programmed cell removal, while acquiring or keeping self-renewal. In the case of chronic myeloid leukemia, bcr-abl+ HSC clones outcompete normal HSCs in the chronic phase. The transition from the chronic phase to myeloid blast crisis results in the leukemia stem cells appearing in the granulocyte-macrophage progenitor (GMP) stage, and is accompanied by cell intrinsic activation of β-catenin, inhabitable by transfection with axin. In 4/7 patients, this resulted from stage-specific (GMP) mis-splicing of the glycogen synthase kinase–3β message, deleting the kinase domain. While there are many ways to defeat programmed cell death and senescence, there appears to be one dominant method to avoid programmed cell removal—the expression of the cell surface “don’t eat me” protein CD47, the ligand for macrophage SIRPa. All cancers tested express CD47 to overcome expression of “eat me” signals such as calreticulin and asialoglycoproteins. Antibodies that block the CD47–SIRPa interaction enable phagocytosis and killing of the tumor cells in vitro and in vivo. All tested human solid tumors and lymphomas/leukemias/myelomas express CD47 and are susceptible to phagocytosis in the presence of anti-CD47 blocking antibodies, including a humanized antibody of the IgG4 isotype. We showed that anti-CD47 antibodies or high-affinity SIRPa proteins synergize with anti-CD20 antibodies to eliminate human non-Hodgkin lymphoma in immune deficient mice. We are moving these compounds toward human clinical trials.

Objectives
We will discuss the process from discovery to therapy in our experience.

Monday Social Program
Wine and Cheese
19:00 - 21:00
Tuesday, May 5th

Coffee
Time: 08:00 - 08:15

Team Building III
Facilitators: Janet P. Hafler, and Anita Small
Time: 08:15 - 09:30

The Concept of druggability: Challenges and Opportunities
Presenter: Salvatore Albani, M.D., Ph.D.
Time: 09:30 - 10:30

Abstract
This conversation will address the general principles inspiring the "druggability" of a compound, technology or process. In other words, what are the key factors influencing the evolution of a scientific discovery or concept through the translational gradient to answer an unmet medical need. A lot of science is outstanding, but not all of it is "druggable".

Objectives
1. Highlight the principles guiding movement from initial investigations into "advanced" studies
2. Discuss designing and managing clinical trials, including data management and interpretation
3. Explore the intersection of interests between key stakeholders (e.g. patients, regulators and business)

Break, 10:30 - 10:45

Pre-Market Medical Product Development
Presenters: Vicki Seyfert-Margolis
Time: 10:45 - 11:45

Abstract
A background on the latest trends in pre-market product development including biomarkers, diagnostics, devices, drugs and biologics will be discussed with respect to the applied science of product development needed to move more innovative products to the market for patients who need them. Various aspects involved in the science needed to improve product development, from pre-clinical to clinical trials will be described as well as the latest policies under discussion in the United States and Europe.

Objectives
1. Discuss the latest trends, gaps and opportunities in the applied science of product development and evaluation (regulatory science).
2. Describe the stakeholders, priorities and up to date efforts ongoing in regulatory science.
3. Examine the various policy discussions surrounding pre-market product development from discovery to market launch, including funding, regulatory, reimbursement, and other considerations.

Group Lunch, 11:45 - 13:00

Unfolding Case Study 1: The Magic Bullet
Written by: Vicki Seyfert-Margolis
Time: 13:00 - 14:00

Abstract
This case examines the full translational tightrope of a targeted therapy, from lead identification to Phase II and III clinical trials. Participants will work in depth with the case in a small group setting over three separate sessions.

Recommended reading


Objectives
Through this case, participants will grapple with the development of a therapy intended for a targeted sub-population, and explore the issues arising in the post-market phase. In addition, participants will discuss and determine research and business strategies necessary to "translate" a potential therapeutic, and co-develop its companion biomarker. Parallel concepts of collaboration and team will also be explored.
From Mountains to Molehills: Transforming Basic Research into Leads
Presenter: Paul Krieg
Time: 14:15 - 15:15

Abstract
Basic molecular research generates interesting data and concepts. While conducting successful and insightful experimentation can be rewarding, it is only the gestational step of translational research. In this session, participants will discuss how to evaluate basic research discoveries for leads and give examples of successful basic science studies leading to clinical insights.

Objectives
1. Identify what a lead is and its key elements
2. Identify strategies for evaluating basic molecular science for translational potential
3. Discuss the next steps once a lead is identified
4. Explore the pathway of IP development with in an institution

Break, 15:15 - 15:30

Mentoring Session II
Time: 15:30 - 17:00

Abstract and Goals
As part of the course, participants will present a dilemma they are currently facing to a small group of peers. This group will be mentored by faculty. Fellow course participants will act as a consultation group. The objective is to advance personal learning while practicing and improving approaches to, and organization of, problem solving. Reflections using practical real-world problems will anchor the concepts raised in the didactic portion of the program.

“Speed Dating”, Session 1
Time: 17:00 - 18:30

Abstract and Objectives
“Speed dating” provides the opportunity for participants to have a series of one-on-one discussions with individual faculty for 10 minutes each. Topics are the participant’s choice. Please consult the faculty biographies at the end of this program prior to completing the signup sheet, which will be available on Tuesday and Thursday through lunch.
Wednesday, May 6th

Coffee
Time: 08:15 - 08:30

Debriefing
Facilitator: Janet P. Hafler
Time: 08:30 - 09:00

Translational Creativity
Artists/Facilitators: Anna van Suchtelen and Brian Goeltzenleuchter
Time: 09:00 - 11:30

Abstract
We like to think that artwork operates like a speed bump that sits casually in the street; not only because it seems to enjoy its ordinary status - privileging those who notice it and gently punishing those who don’t - but because the reaction it generates in the people who run across it seems to say a lot about their comfort level with the things that inevitably happen in life. As artists, we conduct events designed to destabilize – to function outside of the socially-prescribed behavior of artwork; we attempt to test propositions without coercing prescribed outcomes. The forms that our work take include participatory events and environments, scripted and improvised performances, photography and video and olfactory art. As such, we privilege the aesthetic moment over the aesthetic object.

Paintings for Drowning Men: A workshop on translational creativity is a series of participatory art workshops based on the video When to Throw a Painting to a Drowning Man, commissioned by Eureka Institute for Translational Medicine in 2011.

Objectives
Creating a workshop environment in which participants can indulge in creative “tasks” which may include cooking, drawing, singing, dancing, as well as other participatory forms. The tone of the project shifts between the comical, the philosophical, and the therapeutic. Ultimately, it is a celebration of the transcendent nature of creativity in our daily lives.

Group Lunch, 11:30 - 13:00

Current thinking on clinical trial design/co-development
Presenter: Vicki Seyfert-Margolis
Time: 13:00 - 14:00

Abstract
Predictive markers, toxicology models, and tools to help shape intelligent drug design and diagnostic development will be explored.

Objectives
1. Identify state of art technologies for predicting toxicology and efficacy
2. Discuss use of the above to optimize the development of new therapies
3. Explore principles of intelligent design of drug development

Modeling diseases and therapies in experimental systems
Presenter: Norman Rosenblum
Time: 14:00 - 15:00

Abstract
Animal models are commonly used to model human diseases. But how reliable are these models? How does the researcher decide? Participants will analyze dilemmas researchers can face while working with animal models.

Objectives
1. Discuss when and why to use animal models
2. Examine how to use animal models
3. Explore the differences between animal models and human diseases

Break, 15:00 - 15:15

Unfolding Case Study 2 - The Magic Bullet (continued)
Written by: Vicki Seyfert-Margolis
Time: 15:15 - 16:30
Wednesday, May 6th cont.

Small Piece, Big Pie
Presenters: Dirk Elewaut and Berent Prakken
Time: 16:45-18:00

Abstract
This interactive session will discuss the pitfalls of collaborative research in translational medicine. Various partners (academic institutions, industry, regulatory authorities, etc) are implicated when pursuing research in this area.

Objectives
1. Identify differences in approaching collaborative research with different organizations (academia versus industry)
2. Discuss the issue of intellectual property and confidentiality
3. Identify strategies to tackle obstacles in collaborative research

Wednesday Social Program
Wine and Cheese
18:30 - 20:30

Sicilian Delicacies
The title for the “Gastronomic Capital” of Italy is certainly a matter for debate. While some would claim it to be in the Northern regions of the country (specifically Bologna), the South is rich with fresh delicacies. As an island, it makes sense that fish would rank among these fine foods. Bluefin tuna is native of Sicilian waters and sought throughout the world, especially Japan. Fishing techniques date back well over a millennium, with some traceable to Arab rule, and others suspected to be vestiges from the Carthaginian period. Tonnarotti (Italian for tuna fisherman), might recommend a simple breaded tuna steak, while others could tout the finer qualities of “purpetti” (tuna croquettes), or “salsiccia di tonno” (tuna sausage), or even tuna stew. However, one cannot live on fish alone (arguably).

Arabic influences transcend savory dishes, and inspires the sweet. Honey, almonds, and sesame seeds are all linked with the Arabic era in Sicily. They are also the main ingredients for sweets in Siracusa. The “giuggiulena” is a perfect example. Giuggiulena is a hard candy made from exactly those three ingredients. Pistachios, ricotta cheese and chocolate also grace many recipes. Consider the “cassata siracusana” with ricotta cheese and chocolate, or perhaps save your calories for authentic and irreproducible Sicilian cannoli. Since we’ll be in Siracusa during the Santa Lucia festival, one might try a “cuccia”, made with ricotta cheese and candied squash and fruit. Granita (an icy concoction with almond milk) is paradise on a hot summer day.

After all this eating, you might be thirsty. One thing to try (aside from granita) is Nero d’Avola. The origin of the varietal is unknown, and has thus far only been found in Sicily. A sweeter palate will revel in the wine described by Homer and Hesiod: Moscato di Siracusa, which is rumored to be oldest wine in Italy.

Whatever your preference, Siracusa is sure to have something unique and delectable for you.
Thursday, May 7th

Coffee
Time: 08:15 - 08:30

Debriefing
Facilitator: Janet P. Hafler
Time: 08:30 - 09:00

Presenting Preparation and Workshop
Time: 09:00 - 12:00

Abstract
Participants will be given a 5 minute presentation. Peers and faculty will critique the presentation and the presenter will self-evaluate.

Objectives
1. Evaluate the best methods for delivering a message
2. Explore strengths and areas of improvement in your personal presentation style
3. Develop presentation/communication skills

Group Lunch, 12:00 - 13:30

Science 3.0
Presenter: Frank Miedema
Time: 13:30 - 14:15

Abstract
When people think of a scientist, they often think of someone who has his or her head in the clouds, motivated by an entirely untainted desire for the pursuit of knowledge and truth. In this presentation Frank Miedema will cast aside these beliefs about scientists as needlessly naive, and instead suggest that we rebuild our idea of the sciences, particularly the life sciences, with today’s economic reality in mind.

Objectives
1. Understand the impact of external forces on Science as it relates to translational Medicine
2. Develop awareness of the way science shapes both economic and social progress in modern society
3. Realize how increasing pressure to solve real-world problems has forced scientists out of the ivory tower and into the corporate world.

Challenges and Lessons in Building a Culture for Translational Medicine in a New Academic Medical Center
Presenter: Tien Yin Wong
Time: 14:15 - 14:45

Abstract and Objective
Physicians often ask “How do we bring new understanding of disease mechanisms and better treatments to our patients?” In other words, is there a process whereby scientific discoveries are identified, assessed and adopted by physicians, healthcare providers and policy makers to ensure our patients benefit from these innovations? This “process” of scientific discovery to actual clinical application is known is translational medicine, and can be defined as a focused, purposeful method to apply knowledge gained from basic scientific research to clinical practice; it involves bridging new research findings, scientific discoveries and new techniques to approaches in the screening, prevention, diagnosis, treatment of disease. Translational medicine involves the pursuit of the patient’s health as the ultimate outcome.

Unfortunately, translational medicine is rare in many settings; the process is often long, tortuous and difficult and many bench discoveries do not actually get to the bedside. For translational medicine to develop and thrive, three inter-linking forces are needed. First, translational medicine requires a new model of working. Traditional models of scientific discoveries occurring in labs and clinicians picking up discoveries they read in journals and applying these in clinical practice does not work. Multidisciplinary collaboration across specialties, disciplines and industries is the key to driving translational research to success. This requires working models of teams of clinician, clinician scientists, scientists, nursing and allied health professionals. Second, a strong ecosystem and culture that sustains and rewards translational medicine is critical. It involves forging a close partnership between a hospital cluster and a university, the concept of the Academic Medical Center. The partnership must align the traditional divergent missions of healthcare and education, and the cultural differences between academic researchers and practicing doctors. These are challenging issues that must be dealt with upfront. Third, translational medicine requires a group of people who understand both science and medicine – clinician-scientists, who are “connectors” between scientists and doctors, and must speak both “languages”. To translate research, young clinician-scientists must be identified, trained, mentored and supported. Alongside a nurturing environment, supervision, guidance and advice from a sympathetic and wise mentor are essential.
Thursday, May 7th

**Dean’s Forum**
Panelists: Tien Yin Wong, Frank Miedema and Patrick Maxwell  
Facilitator: Berent Prakken  
Time: 14:45 - 15:15

**Abstract**  
Academic medicine is at the center of translational medicine. Deans of medical schools develop the institute’s strategy on research priorities in academic medicine. In this session, deans from top medical schools in different regions of the world will discuss with you their vision and ideas, and how this may (or may not) change in the face of the rapidly changing societal environment. How do they view translational medicine in their institute? How does this influence the career perspectives of translational scientists?

**Objectives**  
1. Understand the role of deans in determining research priorities  
2. Discuss their vision on the future of academic medicine  
3. Understand how deans value career tracks of translational scientists

**Break, 15:15 - 15:30**

**The “I” / “We” Dilemma, or Is Cooperation an Ingredient to my Success?: Team Building IV**
Presenters: Anita Small and Norman Rosenblum  
Time: 15:30 - 16:45

**Abstract**  
This interactive seminar will explore the issue of individual achievement and cooperation in the context of translational research. Methods to enhance cooperation will be explored. The limits of the ‘cooperation model’ will be highlighted and ‘conflict-resolution’ theory will be harnessed to propose a method by which investigators can achieve a higher state of cooperation and greater achievement in research.

**Objectives**  
1. Highlight tensions between individual and team-based achievement in research.  
2. Understand limits of the conventional model of cooperation.  
3. Explore use of conflict-resolution theory to reach a higher stage of cooperation and achievement in research.

**Unfolding Case Study 3 - The Magic Bullet (continued)**
Written by: Vicki Seyfert-Margolis  
Time: 16:45 - 18:00

**Speed Dating II**
Time: 18:00 - 19:00  
Wine served and speed dating

**Abstract and Objectives**  
“Speed dating II” provides another opportunity for participants to have a series of one-on-one discussions with individual faculty for 10 minutes each. Topics are the participant’s choice. Please consult the faculty biographies at the end of this program prior to completing the signup sheet, which will be available on Tuesday and Thursday through lunch.
Effective presenting format

A. Start with a brief statement of the goal to be addressed in your presentation and indicate who you consider to be the target audience.

B. Present for up to five minutes. Your colleagues will participate as the audience and the presentation will be videotaped.

C. 1) You, the presenter, will then view the videotape on your own and, as it plays and for a short time after, develop a list of strengths and suggestions for personal improvement.
   2) While the presenter views the tape, the “audience” of colleagues discusses the strengths of the presentation and suggestions for improvement. Suggestions should
   - Deal with behavior, not with the person.
   - Focus on strengths as much as possible.

D. The presenter and the audience reconvene, each providing feedback on strengths and suggestions. The purpose of this discussion is to:
   - allow for self-reflection on the part of the presenter and feedback in the context of suggestions for future teaching.
   - define and authenticate issues in teaching.
   - provide an occasion for others to help if appropriate.

The Presentation Workshop
Observation Guide

Process
1. How does the presentation begin?
   - How does the presenter capture attention and promote curiosity?
   - How is the overview presented?

2. Is the information presented in a well organized manner?

3. Presentation: Is the delivery paced to the audience’s capacity to follow?
   - Does the presenter avoid reading notes?
   - Does the presenter show any distracting mannerisms?
   - Did the presentation start and end on time?

4. How does the presenter promote active participation? Does he/she
   - use movement?
   - make eye contact with the audience?
   - use aids?
   - ask questions that prompt reflection or response?
   - use buzz groups, voting or brainstorming?
   - problem solve?

5. How does the presentation conclude?
   - Is there a review?
   - Are there follow-up tasks?
   - Is there an evaluation (the one-minute paper)?

6. How is learning assessed?

Content
1. Is the content accurate?

2. Does the presenter show a relationship between theory and practice?

3. Is the level of the material appropriate to the audience?

4. Was the presentation complete?
The Presentation Workshop

Feedback Tips

Definition
The process of giving data back to the participant for the purpose of bringing about change.

Feedback involves responding specifically to an event or occurrence, whether that event be good or bad. Positive and negative feedback should be distinguished from complimenting and criticizing.

Evaluation is an assessment of a learner's achievement and/or performance.

1. Feedback should be undertaken with the observer and participant working as allies with common goals. Begin by discussing respective expectations.
2. Feedback should be descriptive rather than evaluative.
3. Feedback should deal with specific events, rather than generalizations.
4. Feedback should be well-timed, and expected, in close proximity to the event, but not when — the recipient is postcall or angry about the issue; facts are missing; or both sides of the situation have not been explored.
5. Feedback should be based on first-hand data.
6. Feedback should be focused on behaviors that are amenable to change.
7. Feedback should involve sharing of information, rather than giving advice, leaving the receiver free to decide for themselves in accordance with their own goals and needs.
8. Feedback can be structured to include subjective data, as long as it is clearly labeled as such.
9. Feedback should be checked to insure clear communication by having the receiver try to rephrase the feedback.
10. Feedback should be followed by attention to the consequences of feedback.

Taking the Plunge
1. Be clear about the purpose of the feedback session.
2. Get the receiver's perspective as to how things are going.
3. The sandwich technique (i.e., good / bad / good) isn't always reliable.
4. Ask the recipient to offer solutions.
5. Develop solutions to the problem, and a plan to improve the situation.
Friday, May 8th

Coffee
Time: 08:15 - 08:30

Debriefing
Facilitator: Janet P. Hafler
Time: 08:30 - 09:00

Navigating Late-Stage Clinical Development
Presenter: Kenneth A. Oye
Time: 09:00 - 10:00

Abstract
A well-executed translational medicine program will bring a novel therapy through proof-of-concept to beginning Phase 3 trials. Successful navigation of late-stage development requires careful coordination of teams with proficiency in multiple key scientific disciplines as well as regulatory expertise.

Objectives
1. Discuss milestone regulatory interactions that take place in late-stage development.
2. Identify various ways that biomarkers can aid clinical development.
3. Identify changes contributing to growing interest in orphan diseases on the part of biotechnology companies and big Pharma.

Break, 10:00 - 10.15

A Stroll in the Valley of Death: Strategies for Developing a Start-up in the Current Climate
Presenters: Salvatore Albani and Derek Colla
Time: 10:15 - 11:30

Abstract
The “Valley of Death” is a term typically used to describe the vast expanse between an idea and its delivery to patients and the market. The valley is cloaked by the fog of unawareness and swept by the winds of uncertainty. Many dangers lurk in it. We will discuss the various challenges which have to be overcome, including but not limited to funding in the current climate. We will suggest strategies to maximize the chances of success. Our objective is to disperse the fog and provide awareness of the process.

Objectives
1. Identify the elements leading to the formation of a company as a development vehicle for a translational idea
2. Describe the current funding process as well as funding policies and their impact
3. Examine the challenges start-ups encounter in developing an idea into a product tangibly benefitting patients

Group Lunch, 11:30 – 13:00

So you want to spend other people's money?
Presenters: Kenneth A. Oye and Derek Colla
Time: 13:00 - 14:00

Abstract
The most arduous part of translating a project into a product is convincing other people to provide you with financing support for your development plan. The effort and challenge of obtaining a financing commitment from investors is often underestimated by entrepreneurial scientists. Nowadays, several public and private funding sources can help get your company off the ground, at least at the early stage. To help maximize your chances of finding the cash needed it is important to understand the early stage financing landscape, the audience you are pitching to and their objectives. The classic path after seed investment involves a financing round from venture capitalists, professional investors usually with domain expertise, but the number of VC firms that operate in the biomedical space has decreased over the past decade. This means more competition and fewer ears for your pitch. Talking with investors will allow you to gauge whether your venture is perceived to have a chance of succeeding and if there is a place for your product in the market. You will also want to assess whether you and a potential investor are a fit as you will undoubtedly go through difficult times and the relationship will be tested. The strength (or weakness) of this relationship can make or break your company. We will provide a window to the venture capital-centric view of the financing process to help you focus on the important aspects whilst engaging with your investors.

Objectives
• Learn about the different sources of funding and the stage at which each should be sought
• Understand your audience: know what a venture capitalist is looking for and what their objectives are
• Build relationships well before you will be looking for funding
• Choose your investors and pitch accordingly to common grounds between your plans and their expectations
Show me the money - financing your idea is a team sport
Expert Panel: Derek Colla, Matthias Herrath, Patricia Furlong and John Porter
Facilitators: Vicki Seyfert-Margolis and Salvatore Albani
Time: 14:00 - 15:00

Abstract and objective
Show me the Money- Starting a company is much more than a great idea. It requires execution, perseverance and of course financing to bring an idea to the market. In this session we will discuss the business of starting and growing an idea to a business.

Break, 15:00 - 15:15

Communication and Publication
Presenters: Juan Carlos Lopez and David Hafler
Time: 15:15 - 16:15

Abstract
The research is complete. The data have been collected and analyzed. But this is no time to rest. The paper has to be written. Publication in a peer-reviewed journal is almost an automatic requirement for a researcher to be able to move a concept into more advanced stages of development. This session will explore the publication process from an editor’s perspective, and also how this ties into good research practices.

Objectives
1. Define the key elements to include in a paper
2. Discuss the most common mistakes to avoid
3. Discuss how to create a publication strategy

From Waste to Worth: Evolving Models of Science
Panelists: David Hafler, Patricia Furlong, Frank Miedema and Andy Marshall
Facilitator: Berent Prakken
Time: 16:15 - 17:15

Abstract
The traditional scientific system is failing. It is projected that at least 85% of research investment in life sciences ends up completely wasted (Lancet 2014; 383: 101). The reasons for this impressive loss are multiple, ranging from incorrect research questions, sloppy science, and perverse career incentives to lack of access to data. Thus, the traditional systems of science need to evolve to better meet the demands from society. Here, we will discuss these evolving models and how these issues influence translational medicine and translational scientists. As this is a major multifaceted development, it will be discussed from different perspectives; patients, academia, journals and patients.

Objectives
1. To discuss how research waste influences translational science
2. To establish which new models can help to reduce waste and increase impact
3. To study how these new models may influence the careers of translational scientists

Mentoring Session III
Time: 17:15 - 18:30

Abstract and Goals
See session 1 (Sunday) for abstract and Goals.

Siracusa

Some 2,700 years ago, one of the first Greek settlers dubbed this area “Sirako”. This was in reference to the surrounding salt marshes, beautiful areas dense with sensitive and highly specialized vegetation. Its strategic location and saavy inhabitants helped make Siracusa one of the most powerful city-states in all of Magna Grecia. Cicero called it “the most beautiful of them all”. Ruling factions have changed over time, with the Romans, Byzantines, Arabs, Normans and Swabians all fighting for supremacy in the region. Sicily (and Siracusa) has survived each invasion, and absorbed some important influences evident today. For example, May is the opening month of the Greek Theatre, a premier theatrical event in all of Italy. Architecture further infuses the bones of the city, doric and ionic, baroque and roccoco. And art (high and low, old and new) adorns the cityscape and enriches its museums.

Siracusa is not buried in its past, however. The city’s heartbeat is strong with the song of the dolce vita; “ragazzi” enjoy the night life sitting at an open-air coffee-shops, or dancing in one of the many clubs that are concentrated in the area between Piazza Archimede, Piazza Duomo, the Aretusa Fountain and the Alfeo Promenade.
Saturday, May 9th

Coffee
Time: 08:15 - 08:30

Debriefing
Facilitator: Janet P. Hafler
Time: 08:30 - 09:30

Grant Writing Workshop
Facilitators: Carol Gregorio, Paul Krieg and Norman Rosenblum
Time: 09:00 - 11:30

Abstract
Participants will focus on elements of persuasive grant writing using samples of their own grant summary pages as a foundation.

Objectives
1. Explore effect structures (e.g. abstract flow)
2. Examine content for message clarity and delivery
3. Learn self-assessment strategies for written work

Group Lunch, 11:30 - 13:00

Mind the Gap: Managing the transition from the EUREKA course to real life at the job at home
Presenters: Sergio Quezada, Jeffrey Beekman, Richard Foty, Sylvia Brugman, Berent Prakken and Norman Rosenblum
Time: 13:00 - 14:00

Abstract
Now that the course is drawing to a close, it is time to ask … what’s next? Beyond Sicily, what do you do with the principles learned over the past week? During this interactive session, participants will reflect on their ongoing role in translational medicine, explore strategies to integrate these new principles into their professional lives, and discuss the next steps in building a global community committed to translational medicine.

Objectives
1. Reflect on your ongoing role in translational medicine.
2. Determine where you fit along the continuum of translational medicine.
3. Explore strategies to integrate translational medicine into your research.
4. Identify obstacles that may be encountered in the process of this integration, and strategies to overcome them.
5. Identify ways to continue actively developing a global community committed to translational medicine.

Case Study: “Sisyphus”
Facilitator: Norman Rosenblum, M.D.
Time: 14:00-15:00

Abstract
This case study is based on epitope-specific immunotherapy and focuses on compounds designed specifically for humans. Sisyphus addresses typical problems in proof-of-concept, development and regulation. This case also includes the incongruities in animal models of disease versus human application.

Objectives
Explore strategies for lead identification
Explore strategies for chemistry, manufacturing and controls (CMC) studies (funding and conduct)
Explore strategies for safety data in untraditional models

Social Program (Saturday)
20:00 closing dinner

After a week of hard work, creativity and fun please join us for an amazing dinner with enticing wines. Dinner will be served at the Borgia del Casale in the historical suite of Regina Lucia.
The birth of Translational Creativity

In 2011, the time was ripe for the Eureka Institute for Translational Medicine to add Art into their program: Eureka Translational Creativity was born. Since May 2011, Eureka has created work space for artists during the Siracusan course to collaborate with and reflect on the field of Translational Science. The first invited artists were Brian Goeltzenleuchter and Anna van Suchtelen. In 2011 and 2014, they were in residence in Sicily, which resulted in the film *When to Throw a Painting to a Drowning Man*, released in 2012, and in the artist box “paintings for drowning men” (2014).

The projects
*When to Throw a Painting to a Drowning Man* is an artist-made self-help video that shows how creativity can be useful to anyone. The video offers parables and exercises that evoke the structure of a self-help book. It celebrates the transcendent nature of creativity, examining its potential as a skill and tool for problem solving, critical thinking, networking, and team building. “Paintings for drowning men” is a follow up in the form of an artist-made card box.

Artists Brian Goeltzenleuchter and Anna van Suchtelen were invited by the Eureka Institute for Translational Medicine to participate in its international workshop designed to train a new class of translational researcher. The artists developed the video and artist box to highlight the false dilemma of considering art and science as binary opposites. Focusing, instead, on the commonality of innovation, the artists produced the video and artist box for an audience of innovators who strive to come to terms with the uncertainty that accompanies working collaboratively and across disciplinary borders. For this year, the artists will present a new, limited edition art work.
For the 2013 program, photographer Kate Breakey was invited. During which, the work *The Syracuse Still Life* was conducted.

**The project**
I am a mixed media artist. I work with photography (light) and pigment (oil paint, pencils and pastels) and I translate ideas into substance. My work has been heavily influenced by early Northern European painting. I am hoping to inspire 29 translational medicine participants to get involved in a translational creativity project with me. During the Eureka week, we will collaborate to make an artwork as a team. We will use produce from the local Sicilian market as our raw materials and classical Italian still life painting as our inspiration to construct a still life tableau. Each participant will be documented with their contribution, in the style of Renaissance portraiture. The objective is to integrate many small parts into a larger whole that becomes more that the sum of those parts.

**The artist**
Kate Breakey is internationally known for her large-scale, richly hand-colored photographs including her series of luminous portraits of birds, flowers and animals. Since 1980 her work has appeared in more than 85 one-person exhibitions and in over 50 group exhibitions. Her work is held in many public institutions. A native of South Australia, Kate moved to Austin, Texas in 1988. She completed a Master of Fine Art degree at the University of Texas in 1991 where she also taught photography in the Department of Art and Art History until 1997. In 1999, she moved to Tucson, Arizona. Her 4th book, a collection of photograms, entitled ‘Las Sombras / The Shadows’ was publish in 2012.
ADMINISTRATIVE FACULTY BIOGRAPHY

Julia Ong, B.Com.

Julia is the Manager of SingHealth Duke-NUS Paediatrics Academic Clinical Programme (Paediatrics ACP) and was seconded half headcount to Eureka Institute as Executive Manager since October 2013 to assist Professor Salvatore Albani.

This is the second year she is coordinating the Eureka certificate program.

Julia has 25 years of vast experience as an administrator and of which, 13 years were in healthcare. Julia joined KK Women’s and Children’s Hospital in the year 2006 and has been involved with setting up a numerous of initiatives in the hospital; the Women Psychiatric Service to a department in 2011, one of the main lead in the Paediatrics ACP and moving its journey towards Academic Medicine and the initial set up of Professor Albani’s SingHealth Translational Immunology and Inflammation Centre, in 2013.

Julia is also a proud citizen of Singapore “the little-red-dot” and is full of respect for the late Mr Lee Kuan Yew.
FACULTY DISCLOSURES

Nothing to disclose
Salvatore Albani, M.D., Ph.D.
Sylvia Brugman, Ph.D.
Derek Colla, B.Sc., J.D.
Richard Foty MSc., Ph.D Candidate
Dirk Elewaut, M.D., Ph.D.
Patria Furlong, R.N., B.S., M.S.
Carol Gregorio, Ph.D.
Janet Hafler, Ed.D.
Ingrid Lether, M.Sc.
Frank Miedema, Ph.D.

Disclosures

Jeffrey Beekman, Ph.D.
discloses he is an inventor on a patent involving the use of unlabeled drugs from UMCU.

David Hafler, M.D.
discloses an affiliation with 13 Bayer Yakuhin, Ltd, Genzyme, McKinsey and Company, NKT Therapeutics, Novartis Pharmaceuticals, Questcor, Teva Neuroscience, Pfizer, Sage Therapeutics, the Cleveland Clinic Foundation, EMD Sorono, Mylan Pharmaceuticals and Vitae Pharmaceuticals as a consultant/Scientific Advisory Board.

Juan Carlos Lopez, Ph.D.,
discloses an affiliation with Hoffmann-La Roche as an employee.

Matthias von Hertas, M.D.,
discloses an affiliation with Novo Nordisk Diabetes R&D Centre, Seattle for other financial or material support.

Patrick Maxwell, FMed-Sci,
discloses an affiliation with Wellcome Trust for grant/research support, Ohtsuka (not current) as Consultant, Reox Plc. as major stock shareholder and Cambridge University Hospital and Lister Institute for other financial or material support.

Berent Prakken, M.D., Ph.D.,
discloses an affiliation with FP7EU program, Dutch Arthritis Foundation and NWO for grant/research support.

Tien Yin Wong, M.D., Ph.D.,
discloses an affiliation with Novartis, Bayer for grant/research support and Abbott, Novartis, Pfizer, Allergan and Bayer as consultant.

Disclosure not available at time of printing

Andrew Marshall, Ph.D., Roberto Chinello, M.B.A., B.S. Economics, Daria Pierotti, Sergio A. Quezada, Ph.D.
My fundamental research interest is in understanding human immunity and contributing the knowledge to therapeutic and diagnostic advancements. I have developed several innovative approaches in the area of induction and maintenance of immune tolerance in humans, being responsible for the whole translational process from idea to the conclusion of a Phase II clinical trial in autoimmune inflammatory diseases, which have a large impact on society and individuals. I have been responsible for conception and execution of each of the stages of this complex itinerary, which spans a wide and diverse gradient of technologies and challenges.

Development of high throughput technology platforms is also part of my scientific career. These platforms aim to provide tools for knowledge-based diagnostic and therapeutic decisions (various papers and patents under review).

In addition, I have developed a technology for the identification and manipulation ex vivo of antigen-specific T cells. This technology, named T cell capture, is based on entirely artificial antigen presenting cells. It has applications in immunotherapy of cancer and treatment of infections in an immunocompromised host (Nature Medicine, JI. Blood, A&R, Haematologica, various patents). Combined, these approaches span both ways across the gradient of Translational Medicine, which is evidence of and underscores my dedication to this field.

In my role as an educator, it has been my privilege to mentor many talented individuals, and to provide the right challenges and learning opportunities to help them grow and advance. I seek to expand this even further by helping to create and nurture the next generation of translational scientists. An important step is cultivating in translational professionals the necessary awareness, knowledge and experience to contribute significantly to the advancement of the field.
Dr. J.M. Beekman (H factor: 14, male) leads a research group that focuses on the development and validation of individual readouts for personalized therapy in CF, and identification of molecular pathways controlling clinical heterogeneity between individuals. He has been trained in molecular and cellular biology within an immunological context, and became principle investigator in 2010, focussing of CF. His lab developed novel readouts to analyse CFTR protein expression and function in easily accessible patient tissues, and performs intestinal current measurements according to European SOP. He recently developed and patented a highly innovate functional CFTR assay in intestinal organoids, establishing a patient-specific platform for analysis of CFTR residual function and CFTR-targeting drugs. He has been invited speaker at international conferences, universities and companies ~30 times over the last three years, and was awarded ‘Best Translational research prize 2012-2014’ from the Dutch Lung foundation and ‘Best translational article 2013’ (Maarten Kappelle Tweelingen prijs) by the Dutch Pediatric Society. He has published 36 peer-reviewed articles, 3 book chapters, and is senior author of 11 CF publications. He is project leader on multiple grants ranging from basic science (e.g. gene editing of intestinal organoids) to clinical studies that aim to validate in vitro intestinal organoids for CF diagnosis, prognosis and personalized therapy.
Sylvia Brugman is a senior postdoc at the Cell Biology and Immunology group, at Wageningen University where she investigates the intestinal mucosal immune system in health and disease. She investigates microbial composition and immune regulation in the zebrafish gut, and has developed a model for zebrafish enterocolitis. Her current research focuses on innate and adaptive immune mechanisms controlling the response towards microbial and dietary antigens in the intestines and respiratory tract. Sylvia is an alumnus of the Eureka Certificate Program for Translational Medicine (2010). From 2013 she is appointed as e-course developer for the Eureka Institute and together with Elevate Health she developed the introductory course.
I am an experienced consultant with over 20 years experience, with multiple industry exposure, focused on delivery project, change management and organizational development. My passion is about creating strategic foresight and innovative leadership in business and new venture environments, to help anticipate and evaluate future uncertainty, respond to emerging opportunities, and innovate and transform to exploit them. I strongly believe that "people" is what makes the difference at the end of the game.

Please find me in http://it.linkedin.com/in/robertochinello

Composing music means dealing with silence, the thing that happens 'between' sounds. For me, consulting means dealing with what happens 'between' the parts of the organization, the processes, behaviors and decisions. I have learned to listen and actively use silence to understand that there is always a good reason for what I observe. Listening is what makes change possible in organizations, because when we understand what such organizations are we can work to improve their resources, i.e. the things that an organization knows and knows how to do. Jaco Pastorius, an electric jazz bassist I love, said "Keep your mind open, listen to everything that's being played", and I think of this as I watch my children grow and when I play the bass. I have worked in Europe, the USA and Japan. And I have tried to always keep my ears open

roberto.chinello@acutefrog.com
Derek Colla, B.Sc., J.D.

Derek O. Colla is an associate in the Cooley Business Department and a member of the Emerging Companies practice group. He joined the Firm in 2008 and is resident in the Washington, DC office.

Mr. Colla’s practice focuses on representing high growth companies and their investors. He has helped to form, finance, and advise hundreds of emerging businesses in areas such as Internet and digital media, consumer products, clean technologies, software, medical devices, and business services. In the past three years alone, he has counseled companies and investors in over 100 venture capital financings, with an aggregate value greater than $500 million, and has advised companies on numerous mergers and acquisitions, initial public offerings, and follow-on public offerings. While he primarily represents companies in the New York-Washington corridor, Mr. Colla has done transactions with high growth companies all over the world, including a significant number of transactions with Israeli companies.

Mr. Colla received a JD, with honors, in 2008 from Harvard Law School. Following law school, he started his law practice in Cooley’s San Diego office before moving to Cooley’s Washington, DC office in 2011. Mr. Colla holds a BS in Computer Science, summa cum laude, from Washington and Lee University, where he was elected to Phi Beta Kappa.

Mr. Colla is a member of the State Bar of California and the District of Columbia Bar.

Education
- Harvard Law School
  JD, 2008, cum laude
- Washington and Lee University
  BS Computer Science, 2005, summa cum laude, Phi Beta Kappa

Bar Admissions
- California
- District of Columbia
Dirk Elewaut is a full professor of rheumatology and immunology and chair of the Department of Rheumatology at Ghent University Hospital. 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, a Center of Excellence of the European League Against Rheumatism (EULAR) and of the Federation of Clinical Immunological Societies (FOCIS). He has published more than 180 scientific publications, often in high impact journals, and is heading a team of 25 researchers. He recently joined the Inflammation Research Center of the Flanders Institute of Biotechnology (VIB) as a principal investigator. His research interests are centered around translational aspects of immune regulation to combat inflammatory arthritis and associated joint damage.
Richard Foty M.Sc., Ph.D. Candidate

Richard is a fourth year PhD candidate at the Institute of Medical Science, University of Toronto (UofT). His research interests include the health effects of climate change, building predictive models and identifying trends within populations, using secondary data sources. He sits on numerous departmental and faculty committees including one that is focused on the development of a professional Masters program in Translational Research within the Faculty of Medicine at UofT.

Prior to undertaking his doctoral studies, Richard was a Research Coordinator at the Hospital for Sick Children, studying the effects of traffic related air pollution on school children in Toronto. He holds an undergraduate degree in Kinesiology and Health Science from York University and a Masters of Science degree in Epidemiology from UofT. He is a classically trained musician and directs several choirs in Toronto, Canada.
Pat Furlong is the Founding President and CEO of Parent Project Muscular Dystrophy (PPMD), the largest nonprofit organization in the United States solely focused on Duchenne muscular dystrophy (Duchenne). Their mission is to end Duchenne. They accelerate research, raise their voices in Washington, demand optimal care for all young men, and educate the global community.

Duchenne is the most common fatal, genetic childhood disorder, which affects approximately 1 out of every 3,500 boys each year worldwide. It currently has no cure.

When doctors diagnosed her two sons, Christopher and Patrick, with Duchenne in 1984, Pat didn’t accept “there’s no hope and little help” as an answer. Pat immersed herself in Duchenne, working to understand the pathology of the disorder, the extent of research investment and the mechanisms for optimal care. Her sons lost their battle with Duchenne in their teenage years, but she continues to fight—in their honor and for all families affected by Duchenne.

In 1994, Pat, together with other parents of young men with Duchenne, founded PPMD to change the course of Duchenne and, ultimately, to find a cure. Today, Pat continues to lead the organization and is considered one of the foremost authorities on Duchenne in the world.
Brian Goeltzenleuchter (b. 1976) is an artist based in San Diego, USA. His recent projects investigate the use-value of cultural objects and institutions. In 2001 Goeltzenleuchter received his MFA from the University of California, San Diego. From 2002 - 2008 he was Associate Professor of Art at Central Washington University. He is currently a Research Fellow at the Institute for Public and Urban Affairs at San Diego State University, and Artist-In-Residence at the Institute for Art and Olfaction in Los Angeles. His work has been screened, performed, and exhibited throughout the United States, Canada, Austria, Italy, China, Croatia, and the Netherlands.

Selected projects include: 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); Unpacking Iraq, International Festival of New Film/New Media Split, Croatia (2004).
Carol C. Gregorio, PhD, Professor and Department Head of Cellular and Molecular Medicine, Director of Molecular Cardiovascular Research Program and Co-Director of Sarver Heart Center, The University of Arizona

Dr. Gregorio built and currently directs the Molecular Cardiovascular Research Program (MCRP) at the University of Arizona. Researchers in the MCRP are focused on discovering and disseminating knowledge about the underlying biological and molecular mechanisms of heart development, heart function, heart disease and other malfunctions of the cardiovascular system. Their efforts emphasize translational research. A wide variety of interdisciplinary approaches are currently being used to address questions related to cardiovascular and skeletal muscle biology including developmental, physiological, cellular and molecular biology, genetics, bioengineering, biochemistry, proteomics, live-cell imaging, computational biology and bioinformatics. Dr. Gregorio herself runs an active and well-funded research program with a focus broadly summarized as understanding the cellular mechanisms involved in the assembly, regulation and maintenance of contractile proteins in cardiac and skeletal muscle in health and disease. Dr. Gregorio is an active member of several editorial and philanthropic boards, and is the current chair of a National Institutes of Health grant review study section. She received her Doctorate from Roswell Park Cancer Institute in Buffalo, NY with a major in Molecular Immunology, and did her postdoctoral fellowship at the Scripps Research Institute in La Jolla, CA.
Dr. Hafler is the Gilbert H. Glaser Professor and Chairman, Department of Neurology, Yale School of Medicine and is the Neurologist-in-Chief of Yale-New Haven Hospital. He graduated magna cum laude in 1974 from Emory University with combined B.S. and M.Sc. degrees in biochemistry, and the University of Miami School of Medicine in 1978. He then completed his internship in internal medicine at Johns Hopkins followed by a neurology residency at Cornell Medical Center-New York Hospital in New York. Dr. Hafler received training in immunology at the Rockefeller University then at Harvard where he joined the faculty in 1984. He was one of the Executive Directors of the Program in Immunology at Harvard Medical School and was on the faculty of the Harvard-MIT Health Science and Technology program where he was actively involved in the training of graduate students and post-doctoral fellows. Dr. Hafler has been elected to membership in the American Society of Clinical Investigation, The American Neurological Association, the Alpha Omega Society, and was a Harvey Weaver Scholar of the National Multiple Sclerosis Society. He is currently a member of the editorial boards for Journal of Clinical Investigation and the Journal of Experimental Medicine, and is co-founder of the Federation of Clinical Immunology Societies. Dr. Hafler is a clinical scientist with a research interest in understanding the mechanism of autoimmunity with a particular interest in inflammatory central nervous system diseases, with over 300 publications in the field of autoimmunity and immunology. He received the 1st National Multiple Sclerosis five year Collaborative Center Award for tackling the MS genetic effort. Hafler leads the NIH Autoimmunity Prevention Center Grant at Yale, and was a Jacob Javits Merit Award Recipient from the NIH.

His laboratory focuses on the understanding of human autoimmune diseases with the theme that investigation of naturally occurring human diseases give insight into the basic processes of T cell regulation, in addition to providing fundamental understanding and development of new therapies for human diseases. The laboratory has defined immunodominant epitopes of autoantigens, and has developed new technologies to measure both functionality and frequency of autoreactive T cells. More recently, Dr. Hafler has focused on broadly characterizing the molecular pathogenesis of the disease, both at the DNA, mRNA, and proteomic level. Dr. Hafler is a founding member of the International MS Genetic Consortium, a group recently formed to define the genetic causes of MS including scientists from University of Cambridge and University of California, San Francisco.
Janet Hafler is a Professor of Pediatrics and is the Associate Dean for Educational Scholarship at Yale University School of Medicine. As the Director of the Teaching and Learning Center her responsibilities include developing and implementing medical education and teaching and learning programs for faculty members, students and residents. Over her career she has nurtured a climate in teaching and learning where faculty and residents have been exposed to the cutting edge literature and ideas in medical education. She has focused on assisting faculty and residents in exploring innovative ways to effectively promote learning in both the classroom and 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. She has focused on providing an awareness of context for students, residents and faculty, urging them to be innovative in their many teaching environments and encouraging them to explore ways to understand how they can effectively promote learning in their interactions among themselves.

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 has published over 100 book chapters, curriculum materials and original articles in medical education and clinical journals. She has served as visiting professor internationally and has been invited to present regularly at regional and national professional meetings.
Matthias von Herrath, M.D.

Matthias von Herrath, MD, is Head of the Novo Nordisk Type 1 Diabetes Research and Development Center in Seattle and a Professor at the La Jolla Institute for Allergy and Immunology in California. Dr. von Herrath is a world-renowned researcher in autoimmune diseases and type 1 diabetes. He was awarded the American Diabetes Association Outstanding Achievement Award in 2008, the Paul Langerhans Preis by the German Diabetes Society in 2014, and has been named the top type 1 diabetes expert in the world by Expertscape medical search and ranking service. Additionally, Dr. von Herrath is president of the Immunology of Diabetes Society and the Clinical Immunology Society.

- Head of the Novo Nordisk Type 1 Diabetes Research and Development Center
- Professor at the La Jolla Institute for Allergy and Immunology in California
- Awarded the American Diabetes Association Outstanding Achievement Award in 2008 and the Paul Langerhans Preis by the German Diabetes Society in 2014
- Named the top type 1 diabetes expert in the world by Expertscape medical search and ranking service
- Past president of the Immunology of Diabetes Society and the Clinical Immunology Society
Paul Krieg, Ph.D.

Professor of Cellular and Molecular Medicine, University of Arizona College of Medicine.

Dr. Krieg carries out basic research investigating development of the cardiovascular system.

Dr. Krieg has many years of experience in molecular, cellular and developmental biology research. His laboratory focuses on development of the heart and blood vessels in the vertebrate embryo using the frog and chicken as model systems. In recent years studies have concentrated on transcriptional regulation of cardiovascular genes and on the signaling pathways regulating the patterning of embryonic blood vessels. Dr Krieg has published a broad range of articles in basic science journals and participates in national and international research meetings. He teaches basic molecular biology and early embryonic development to medical students in the University of Arizona College of Medicine. He has served on consulting boards for several Biotechnology companies in the US and has more than 20 years of experience reviewing grants on US National Institutes of Health grant review committees and other national and international grant review panels.

Dr. Krieg graduated with a PhD in Molecular Biology from the University of Adelaide in Australia and then carried out postdoctoral research at Harvard University. He established and independent research laboratory at the University of Texas at Austin in 1988 and then moved to the University of Arizona in 1999, where he is currently the Allan C. Hudson and Helen Lovaas Endowed Professor of the Sarver Heart Center.
Ingrid Lether 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.
Juan Carlos López, Ph.D.

Juan Carlos López was born in Oaxaca, México, in 1967. He obtained his first degree on Biomedical Research at the Universidad Nacional Autónoma de México, majoring in neuroscience. Juan Carlos got his Ph.D. degree from Columbia University (New York) in the laboratory of Eric Kandel, studying synaptic plasticity in neuronal cultures. He then carried out postdoctoral work at the Instituto Cajal (Madrid), studying presynaptic mechanisms of transmitter release. During this period, Juan Carlos wrote a book on the neurobiology of memory ("El Telar de la Memoria", Algar Editorial), with which he won the IV European Award of Scientific Dissemination in 1998. Two years later, Juan Carlos left experimental research to become Editor of Nature Reviews Neuroscience in London. In January 2004, he returned to New York to become the Chief Editor of Nature Medicine.

In February 2014, Juan Carlos left the publishing industry to become Head of Academic Relations and Collaborations at Hoffmann-La Roche. In this role, he and his team are charged with fostering interactions of his company with academic institutions worldwide with the aim of promoting the advance of translational research and the discovery of new medicines.

Juan Carlos has also served as a member of the Scientific Advisory Board and of the Board of Directors of Noscira, a Spanish biotechnology company interested in neurodegeneration, and a member of the Board of Directors of the Eureka Institute, an international initiative that aims to promote translational research by fostering the education of MDs and PhDs interested in bridging the gap between bench and bedside.
Andrew Marshall, Ph.D.

Andrew Marshall was appointed Chief Editor of Nature Biotechnology in 2000 after joining the journal in 1996. Since that time, the journal’s impact factor has increased from 11.0 to 32.0. As well as frequently speaking about biotechnology research and translation at international meetings while walking in ever-decreasing circles, he also organizes conferences and symposia for the journal. He has more years of experience in scientific publishing than he would care to mention, particularly at a ‘luxury’ journal; previously, he was Editor of Current Opinion in Biotechnology from 1992 to 1996. He has written hundreds of articles and editorials of varying quality and interest and has contributed to the popular media, including The Economist and Popular Science, and for trade publications. In 2003, he launched Nature Biotechnology’s free-access web portal Bioentrepreneur (www.nature.com/bioent) providing practical information and advice on the challenges of starting a biotechnology enterprise. Since 2007, he has been hosting the networking events termed SciCafés in Boston, San Francisco, San Diego, Houston, London and now New York, which showcase rising stars in academia to early-stage investors and industry R&D leaders. He obtained a BSc with Honors and his PhD and postdoctoral experience in molecular biology and microbiology at King’s College London, where has was given the Helen White Prize, likely as a result of a clerical error.
Professor Patrick Maxwell undertook postgraduate clinical and research training in nephrology and general medicine at Guy’s Hospital, London and then in Oxford.

In 1997 he was appointed as University Lecturer and subsequently Reader at the University of Oxford. In 2002 he moved to the Professorship of Nephrology at Imperial College, and in 2008 was recruited to the Chair of Medicine at University College London. In 2011 he was promoted to be inaugural Dean of the Faculty of Medical Sciences at UCL. He was appointed Regius Professor of Physic and Head of the School of Clinical Medicine of the University of Cambridge in 2012.

Professor Maxwell has been centrally involved in a series of discoveries that have revealed how changes in oxygenation are sensed, and also how genetic alterations cause kidney disease. He currently holds a Wellcome Trust Senior Investigator Award and has a research group in the Cambridge Institute for Medical Research.

Professor Maxwell has served on a number of national grant committees. He was elected a Fellow of the Academy of Medical Sciences in 2005 and was its Registrar from 2006 – 2012. He is currently Chair of the Medical Research Council’s Molecular and Cellular Medicine Board. He is also a Scientific Founder and Director of ReOx plc (University of Oxford spinout).
Frank Miedema studied biochemistry at the University of Groningen, specializing in immunology. As Divisional Manager at the Central Laboratory of the Blood Transfusion Service (CLB) he was responsible for such things as education and research, before going on to become Director of Sanquin Research. Miedema was affiliated with the University of Amsterdam as professor of Immunology of AIDS. In 2004 he became head of the Immunology department at UMC Utrecht. As of 2009, Miedema is vice chairman of the Executive Board of the UMC Utrecht and dean of the Medical Faculty of the University Utrecht.

Miedema is a member of various national and international scientific organizations and advisory committees. He has published hundreds of articles in medical journals, including Nature, Science and Lancet, and is one of the initiators of www.scienceintransition.com. The initiators of Science in Transition believe that the scientific system is in need of fundamental reform. Science should be appreciated for the added value it contributes to society and stakeholders in society must participate in decisions regarding the production of knowledge.
Kenneth A. Oye, BA, MA, Ph.D

Kenneth A. Oye is Director of the MIT Program on Emerging Technologies (PoET), with a joint appointment in Political Science and Engineering Systems. Professor Oye is a faculty associate of the MIT Center for Biomedical Innovation and the MIT Synthetic Biology Center.

His work on science and technology policy is on adaptive regulation of biotechnologies, with articles on:
- pharmaceuticals licensing policy and legal issues in *Clinical Pharmacology and Therapeutics*; and
- synthetic biology risks in *Science, ACS Synthetic Biology, Journal of Environmental Studies and Sciences*, and *Politics and the Life Sciences*.

His books on international relations include *Cooperation under Anarchy, Economic Discrimination and Political Exchange*, and four volumes on American foreign policy.

Professor Oye served as an invited expert for the President’s Council of Advisors on Science and Technology on pharmaceuticals innovation, the WHO consultation on Dual Use Research of Concern, the UN Biological Weapons Convention Meeting of Experts, the NRC Board on Global Science and Technology, and the American Academy of Arts and Sciences Conference on Biosecurity, Nuclear Security and Cybersecurity. He serves as Director of Policy and Practices in the NSF Synthetic Biology Engineering Research Center (SynBERC) and as a member of the International Risk Governance Council Scientific Advisory Board.

He has taught at the John F. Kennedy School at Harvard University, the University of California at Davis, Princeton University and Swarthmore College and was a guest scholar at the Brookings Institution. He holds a BA in Economics and Political Science with Highest Honors from Swarthmore College and a Ph.D in Political Science with the Chase Dissertation Prize from Harvard University.
Daria Pierotti, BSc., MSc., Cpsychol.

I have worked as HR consultant in the last 16 years. As a Clinical Psychologist, I have chosen to work in complex organizations and focus on my passion: the human being, its behaviors and its emotional and cognitive side.

I am absolutely convinced that the biggest and most valuable challenge, particularly during a training session or an individual/team development context, is to help people increasing their awareness about who they are, how they are perceived by others and how they can contribute in the teams and social systems to which they belong.

I have built my experience by collaborating with several consulting companies, often in a multinational environment. I love designing and managing training processes that can help the participants creating moments of discovery and different ways to express their inner self.

Please find me in https://www.linkedin.com/pub/daria-pierotti/9/30/9b0?domainCountryName=&csrfToken=ajax%3A4106349619457616992

As a mother of two young girls, I strongly believe that the best way to learn is a combination of having fun while staying in a protected environment, where mistakes are allowed and there is always an opportunity to grow and improve.

I learned that rules are necessary because they can contribute to make people feel safe, and that leadership is primarily sharing a vision and recognizing the value that individual differences can bring to the group.

All my personal life as well my professional achievements have been orchestrated as opportunities to grow, expand my mind and find new way of doing what I love.

pierottidaria@gmail.com
John D. Porter, Ph.D.

John Porter is Chief Executive Officer for Parent Project Muscular Dystrophy. Parent Project Muscular Dystrophy (PPMD) is the largest most comprehensive nonprofit organization in the United States focused on finding a cure for Duchenne muscular dystrophy—our mission is to end Duchenne. Along with Pat Furlong, Founder and President, and Kimberly Galberaith, Chief Operating Officer, John leads a dedicated staff in supporting a wide range of activities to improve the quality of life and advance therapies for people living with Duchenne muscular dystrophy.

Over a 21-year academic research career, John worked on extraocular muscle biology in health and disease, including the mechanisms responsible for its novel responses to a variety of neuromuscular disorders. In the subsequent 10 years at the U.S. National Institutes of health, he managed research grant funding that included diseases affecting the motoneuron, neuromuscular junction, nerve, and skeletal muscle. John also served as Executive Secretary for the interagency Muscular Dystrophy Coordinating Committee and on advisory boards for variety of foundations and academic organizations. During that time, he worked to facilitate drug discovery and development partnerships with stakeholders in academia, patient advocacy groups, government, and industry. He now helps coordinate improvements in care and treatment for people living with Duchenne muscular dystrophy.

Parent Project Muscular Dystrophy
Berent Prakken (MD, PhD) is a professor of immunology and pediatrics at the Utrecht Medical Center Utrecht, the Netherlands. He is chair of Research and Education of the Wilhelmina Children's Hospital. Berent Prakken heads a translational research lab that focuses on regulation of inflammation and biomarker development in human inflammatory diseases. He and his group received various prestigious national and international awards and grants. The Prakken lab hosted a core facility for the Immune Tolerance Network of the NIH, and is an international expertise centre for the LumineX technology. Prakken serves as an editor and associate editor of several journals including the Annals of Rheumatic Diseases and the European Journal of Immunology, and is a regular reviewer for most major journals in his field. Berent Prakken was among others chair of the standing committee of pediatric rheumatology in EULAR, and member of the PRES council and EULAR executive committee. He is member of the steering committee of UCAN (international federation facilitating biological research in arthritis) and (thanks to a 1 million euro grant from the Dutch Arthritis foundation) set up the first international platform for biological studies in arthritis (UCAN-U, www.ucan-u.org). He is coordinator of EUTRAIN, an EU FP7 Marie Curie Integrated Training Network for translational research in pediatric rheumatology. Berent Prakken’s personal commitment is to collaboration and training & education. Unconventional thinking and crossing traditional boundaries inspire him, just as his close friendship with Salvo Albani and the other board members of Eureka. As co-founder and board member he enjoys the journey on which Eureka is taking them.
FACULTY BIOGRAPHIES

Sergio Quezada, Ph.D

Dr. Sergio Quezada is a Professorial Research Fellow and Group Leader at UCL Cancer Institute in London where he heads the Immune Regulation and Tumour Immunotherapy Laboratory. Prior to this, Dr. Quezada worked with Dr. James Allison at Memorial Sloan-Kettering Cancer Center studying the mechanisms governing anti-tumour T-cell immunity, and how these mechanisms can be manipulated for the generation of potent anti-tumour immune responses.

Dr. Quezada's research interest at UCL focuses in the study of the mechanism of action of anti-CTLA-4, anti-PD-1 and other immune-modulatory antibodies targeting co-inhibitory and co-stimulatory pathways (including ICOS, 4-1BB, OX-40) and used as novel anticancer therapies. His group has particular interest in the evolution of the immune response to cancer, the impact of immune-modulatory antibodies in the fate and function of tumour reactive T cells, and the role that the tumour microenvironment plays in the response and resistance to such therapies.

Dr. Quezada is a Cancer Research UK Career Development fellow and the recipient of a Cancer Research Institute investigator Award.
Maria Grazia Roncarolo, M.D., Ph.D.

Maria Grazia Roncarolo, MD is the co-director of the Institute for Stem Cell Biology and Regenerative Medicine, the George D. Smith Professor in Stem Cell and Regenerative Medicine, Professor of Pediatrics and of Medicine (blood and marrow transplantation), chief of the Division of Pediatric Stem Cell Transplantation and Regenerative Medicine, and co-director of the Bass Center for Childhood Cancer and Blood Diseases.

Dr. Roncarolo leads efforts to translate scientific discoveries in genetic diseases and regenerative medicine into novel patient therapies, including treatments based on stem cells and gene therapy. A pediatric immunologist by training, she earned her medical degree at the University of Turin, Italy. She spent her early career in Lyon, France, where she focused on severe inherited metabolic and immune diseases, including severe combined immunodeficiency (SCID), better known as the “bubble boy disease.” Dr. Roncarolo was a key member of the team that carried out the first stem cell transplants given before birth to treat these genetic diseases.

While studying inherited immune diseases, Dr. Roncarolo discovered a new class of T cells. These cells, called T regulatory type 1 cells, help maintain immune system homeostasis by preventing autoimmune diseases and assisting the immune system in tolerating transplanted cells and organs. Recently, Dr. Roncarolo completed the first clinical trial using T regulatory type 1 cells to prevent severe graft-versus-host disease in leukemia patients receiving blood-forming stem-cell transplants from donors who were not genetic matches.

Dr. Roncarolo worked for several years at DNAX Research Institute for Molecular and Cellular Biology in Palo Alto, where she contributed to the discovery of novel cytokines, cell-signaling molecules that are part of the immune response. She studied the role of cytokines in inducing immunological tolerance and in promoting stem cell growth and differentiation.

Dr. Roncarolo developed new gene-therapy approaches, which she pursued as director of the Telethon Institute for Cell and Gene Therapy at the San Raffaele Scientific Institute in Milan. She was the principal investigator leading the successful gene therapy trial for SCID patients who lack an enzyme critical to DNA synthesis, which is a severe life-threatening disorder. That trial is now considered the gold standard for gene therapy in inherited immune diseases. Under her direction, the San Raffaele Scientific Institute has been seminal in showing the efficacy of gene therapy for otherwise untreated inherited metabolic diseases and primary immunodeficiencies.

Dr. Roncarolo’s goal at Stanford is to build the teams and infrastructure to move stem cell and gene therapy to the clinic quickly and to translate basic science discoveries into patient treatments. In addition, her laboratory continues to work on T regulatory cell-based treatments to induce immunological tolerance after transplantation of donor tissue stem cells. In Nature Medicine, Dr. Roncarolo recently published her discovery of new biomarkers for T regulatory type 1 cells, which will be used to purify the cells and to track them in patients. She also is investigating genetic chronic inflammatory and autoimmune diseases that occur due to impairment in T regulatory cell functions.
Dr. Rosenblum is Professor of Pediatrics, Physiology, and Laboratory Medicine and Pathobiology, and Associate Dean, Physician Scientist Training, at the University of Toronto. As Associate Dean, he is Director of the Undergraduate MD/PhD Program and the Postgraduate Clinician Investigator Program, which together consist of over 150 trainees. Dr. Rosenblum is leading reform of the educational pathway for physician scientists at the University of Toronto and is a frequent advisor on clinician scientist career development in Canada and beyond. He served as Associate Chair of Pediatrics (Research), University of Toronto, from 2001-2008 and led the Canadian Child Health Clinician Scientist Program (CCHCSP) from its inception in 2002 to 2012. Dr. Rosenblum is also a Pediatric Nephrologist and Senior Scientist in Developmental and Stem Cell Biology at The Hospital for Sick Children. He holds the Canada Research Chair in Developmental Nephrology (2005-2019). The focus of Dr. Rosenblum’s research is molecular mechanisms that control formation of the normal and malformed mammalian kidney. He is the author of over 100 peer-reviewed papers and chapters on this subject. Dr. Rosenblum is the recipient of the 2004 Aventis Pasteur Research Award, the American Pediatric Society inaugural 2006 Norman J. Siegel New Member Outstanding Science Award, the Society for Pediatric Research 2010 Maureen Andrew Award in Mentoring, and the Kidney Foundation of Canada 2011 Medal for Research Excellence. Dr. Rosenblum is a founding member of the EUREKA Institute for Translational Medicine, a member of the EUREKA Board of Directors, and a teacher in the annual Certificate Course.
Vicki L. Seyfert-Margolis, Ph.D.

Vicki L. Seyfert-Margolis 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.

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 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.

Dr. Seyfert-Margolis was also an Adjunct Associate Professor with the Department of Medicine at the University of California San Francisco. 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.
Dr. Small, sociolinguist, educator and researcher, is founder and owner of small LANGUAGE CONNECTIONS, providing language, culture and communication expertise to non-profits, businesses and educational institutions. Her work focuses on giving “voice” to marginalized groups and creating collaborative communicative contexts for change. She is most known for her innovative program development in the Deaf community. She is Co-Founder and past Co-Director of the DEAF CULTURE CENTRE, Canada, the first of its kind internationally, featuring a museum, art gallery, library, archives and multi-media production studio. Dr. Small taught in the Deaf Education Training Program, Faculty of Education at York University for 12 years and in the Linguistics Department at the University of Toronto. She has authored publications on language planning, bilingual pedagogy, sign language literacy, Deaf identity and cross-cultural interaction.


Dr. Small has her Doctorate of Education in Sociolinguistics (1986) and Cultural Mediation Training and Staff Dispute Resolution Training (1992). She established the Staff Cultural Mediation Program at the first bilingual school for Deaf children in the U.S. and has taught, consulted and mediated for Deaf and hearing staff at schools, universities, businesses and non-profit organizations in the U.S., Canada, Japan and the Netherlands. Dr. Small is recipient of the singular national award from the Canadian Deaf community (2006) given to a hearing individual. www.anitasmall.com
Anna van Suchtelen (New York 1961) studied Literature (MA) in Groningen, the Netherlands and Visual Arts at University of California San Diego, USA. Over the years she professionally moved from literary editor to visual artist. Text and narrative play a crucial role in her visual work, which includes installations, 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 projects include: 0° (2015), a film triptych with ice cubes; Pioneer Pop (2014) and Pilgrim Kootwijk (2013-12), interactive walks and film reports; Our Airs Conspire, installation with heat, sound and breathing (2013) nominated by K.F. Hein Art Stipendium; I got life!, installation with shower curtain and soundtrack (2011); Lindenduft, installation with memory cupboards and film (2010); Soft Voices, installation with listening glasses and film (2009); Overtocht (Passing), film and performance on a ferry (2009-08).

http://www.annavansuchtelen-eng.kunstinzicht.nl/
Lucy Wedderburn is a Professor in Paediatric Rheumatology at UCL (Institute of Child Health) and a Consultant at Great Ormond Street Hospital (GOSH).

She trained in Cambridge and then London in Immunology and Rheumatology and then spent time training in science in the University of Stanford, USA, before returning to University College London (UCL) and GOSH on a Wellcome Trust Fellowship. She has been at GOSH for more than 10 years as a consultant. Lucy’s research group investigates the mechanisms of childhood autoimmunity and what controls immune responses. She is the PI of two large inter-national translational research networks in the field of Paediatric Rheumatology (in childhood arthritis, JIA and myositis, JDM) and has led the development of databases now being used to enhance clinical care, research and specifically efforts in stratified medicine. Her current work includes introduction of a new biomarker for prognostic use in JIA and integration of proteomic/genetic/transcriptome data for biomarker discovery (funded in part by a BRC-Industry partner grant, partner: Pfizer). She is Director of the Arthritis Research UK Centre for Adolescent Rheumatology at UCL ULCH and GOSH which aims to capacity build and enhance translational science in the field of Adolescent Rheumatology. Lucy has been involved with the Eureka program and has led the UCL involvement in this programme since 2009.
Irving Weissman, M.D.

Director, Stanford Institute for Stem Cell Biology and Regenerative Medicine, Director, Stanford Ludwig Center for Cancer Stem Cell Research and Medicine, Professor of Pathology and Developmental Biology

Stanford University, 265 Campus Drive W, Room G3167, Stanford, CA 94305

Irving L. Weissman, MD, is the Director of the Stanford Institute for Stem Cell Biology and Regenerative Medicine and Director of the Stanford Ludwig Center for Cancer Stem Cell Research. Dr Weissman was a member of the founding Scientific Advisory Boards of Amgen (1981-1989), DNAX (1981-1992), and T-Cell Sciences (1988-1992). He co-founded, was a Director, and chaired the Scientific Advisory Board at SyStemix (1988-1996), StemCells Inc. (1996-present), and Cellerant (2001-2009).

His research encompasses the biology and evolution of stem cells and progenitor cells, mainly blood-forming and brain-forming. He is also engaged in isolating and characterizing the rare cancer and leukemia stem cells as the only dangerous cells in these malignancies, especially with human cancers. He discovered that all cancer stem cells express CD47, the ‘don’t eat me’ signal, to overcome phagocytic signals that arise during cancer development, and has shown that blocking antibodies to CD47 have therapeutic potential for all tested human cancers. Finally, he has a long-term research interest in the phylogeny and developmental biology of the cells that make up the blood-forming and immune systems. His laboratory was first to identify and isolate the blood-forming stem cell from mice, and has purified each progenitor in the stages of development between the stem cells and mature progeny (granulocytes, macrophages, etc). At SyStemix, he co-discovered the human hematopoietic stem cell, and at StemCells Inc., he co-discovered a human central nervous system stem cell. In addition, the Weissman laboratory at Stanford has pioneered the study of the genes and proteins involved in cell adhesion events required for lymphocyte homing to lymphoid organs in vivo, either as a normal function or as events involved in malignant leukemic metastases.

Professor Weissman is a member of the Council and Institute of Medicine at the National Academy of Sciences, and a member of the American Association of Arts and Sciences. He has received many awards, including the New York Academy of Medicine Award for Distinguished Contributions to Biomedical Research, the Pasarow Award in Cancer Research, the California Scientist of the Year, the De Villiers International Achievement Award of the Leukemia Society of America, the Robert Koch Award, the Rosenstiel Award, the Max Delbruck Medal, the Jessie Stevenson Kovalenko Award of the National Academy of Sciences, and most recently the Charles Rodolphe Brupbacher Prize for Cancer Research. He also has several honorary doctorates.
Professor Wong is Medical Director of the Singapore National Eye Center and concurrently, Vice-Dean, Office of Clinical Sciences at the Duke-NUS Medical School and Group Director, Research at SingHealth. He was previously Executive Director of the Singapore Eye Research Institute, Chairman of the Department of Ophthalmology at the National University of Singapore and Chairman of the Department of Ophthalmology at the University of Melbourne, Australia. He balances clinical practice in ophthalmology, focusing on retinal diseases such as diabetic retinopathy and age-related macular degeneration, with a broad-based research program comprising epidemiological, clinical and translational studies of Asian eye diseases, and on the use of retinal imaging to predict disease risk. Prof Wong has published >900 peer-reviewed papers, including papers in the New England Journal of Medicine, the Lancet, JAMA, and Nature, and given >200 invited plenary, symposium and named lectures globally. He has received >US$40 million in grant funding. For his achievements, he has received numerous awards, including the President’s Science Award.
Nico Wulffraat, M.D., Ph.D.

Nico Wulffraat is professor of pediatric Rheumatology at the department of pediatrics, at the University Medical Center, The Netherlands. He obtained his MD and PhD (1987) at the Free University Hospital Amsterdam. He 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). Nico Wulffraat 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. Wulffraat is coordinator of a FP7 consortium for pharmacovigilance of biologics used in JIA (PHARMACHILD).

Also He leads the EAHC 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 the European PRES and PRINTO organisations. He is involved in stimulating active patient participation in research and routine care. Focus of attention here is evaluating the burden of disease and discovering issues that really matter for patients.

Since 2008 Nico Wulffraat became supervisor of the postgraduate clinical fellowship pediatric rheumatology and since 2009 head of pediatric immunology and rheumatology. In 2014, he was appointed as head of pediatric Rheumatology, Immunology, haematology and infectious diseases.

Prof. dr. Nico Wulffraat has co-authored 220 Pubmed cited papers in international journals on pediatric rheumatology and immunology and 12 chapters in books. Hirsch index is 47.
PARTICIPANTS BIOGRAPHIES

Syed Sohaib Ali, M.SC.

Syed Sohaib Ali was born in Islamabad, Pakistan in 1985. He became annoyed while studying Chemistry during school, thereby ended up choosing Engineering as his majors in the University. After his Bachelors degree, he found the aptitude to be a computer scientist in the field of Bio-medical Engineering. Before moving abroad and starting his PhD degree in Bio-informatics, he held up temporary academic positions while also consulting for various defence related projects in Pakistan. In 2013, he was awarded Marie-Curie fellowship under FP7-PEOPLE-2011-ITN program of European Commission. He is now conducting translational research on pediatric rheumatology where he is interested in computational perspective. Apart from being a computer nerd, Sohaib is also interested in philosophy, psychology, music and football. He spends most of his private time blogging about these topics. Currently living in Genoa Italy, he can be reached at sohaibali01@gmail.com.

Danielle Barnes, M.D.

Danielle Barnes is a second year gastroenterology, hepatology, and nutrition fellow at Stanford University in Palo Alto, California, USA. Danielle originally hailed from the University of Florida where she gained her initial focus on nutrition through her major studies and early research experiences. During medical school, a research fellowship at the National Institutes of Health’s National Institute of Child Health and Human Development afforded her the opportunity to study cellular signaling in novel fibroid treatments. This laboratory experience, along with her strong clinical mentorship in both pediatric residency and pediatric gastroenterology fellowship, has shaped her research interests in translational medicine. Her current research focuses on the human gut microbiome and the intricate concert of interactions which occur with the human host. She is currently both building the first clinical Fecal Microbiota Transplant (FMT) program at Stanford and conducting a feasibility cohort study to establish a novel protocol in pediatrics using a frozen, universal donor-based transplant material after selecting the best donor via assessment of bacterial diversity and a number of markers of gut health. She looks forward to the ongoing collaboration opportunities that come with working in the area of the microbiome and better elucidating the ways one can impact disease via the microbiome. Advocacy work is another area of interest for her, having had many opportunities to use her role as a physician to lobby the needs of the pediatric population. She looks forward to continuing her career at an academic medical center after fellowship where she will pursue both clinical care and her translational research interests and collaborations.
Inmaculada Buendia Jiménez studied Veterinary Medicine at the University of Murcia, a medium-size town in the South East of Spain. As part of her training, she did 1 year internship at the Veterinary School of Nantes, France. She graduated in 2000 and specialized in food industry at the Institute of Animal Production, Ploufragan, France. She initiated her career in the veterinary pharmaceutical industry (Intervet Pharma, Angers, France), working as a Preclinical and Clinical Specialist in cardiovascular research. In 2005, she moved to the academic research and completed a MSc. in Cell Biology at the University of Trinity College, Dublin, Ireland. After her graduation, she decided to move back to the industry and joined the clinical studies department of Danone Research, Palaiseau, France. As a Clinical Study Manager she enjoyed leading multi-disciplinary teams and managing clinical trials in complex environments. She focused on assessing the impact of nutrition and dairy products in cardiovascular risk. Currently, she supervises the Hydration and Kidney Health Research Program of the Danone Research Water Division. Her ambition is to evaluate the efficacy of water intake to prevent urinary tract pathologies such as chronic kidney diseases, kidney stones and urinary tract infections and to translate the knowledge into clinical practice. In her free time, Inma loves to play with her 2 year old daughter and dance Zumba.

Derrick Chan Wei SHIH, BMBS BMedSci MRCPCH MCI CSCN FAMS

Born in Singapore, I studied in Singapore and then the United Kingdom. I studied medicine at Nottingham University and trained in Paediatrics in London. I returned at the start of my registrar training to Singapore and completed my paediatric training at KK Women’s and Children’s Hospital. I trained in Paediatric EEG at the Royal Children’s Hospital in Melbourne and did a 15-month Clinical Fellowship in Paediatric Epilepsy at the Hospital for Sick Children in Toronto. I completed the Canadian Society of Clinical Neurophysiologists EEG certification exam. On my return to Singapore, I set up the paediatric epilepsy programme at KKH and built up the paediatric neurology unit at KKH into the largest in Singapore. I obtained an A*STAR BioEngineering Programme grant in 2008, completed a Masters Degree in Clinical Investigation in NUS and have received national level grants for the past 6 years. My research interests are 1.) translational pharmacogenomics of HLA-B*1502 and severe cutaneous drug reactions to carbamazepine, 2.) seizure patterns and computer-vision based detection and 3.) quantitative EEG and prognostication in refractory status epilepticus.

My challenges are 1.) to sustain and develop my research projects further and continue to apply for competitive grants 2.) support and develop my Paediatric Neurology Team’s clinical, research and education portfolios and 3.) nurture the research culture in our Paediatric Academic programme as the Deputy Vice-Chair for Research.
PARTICIPANTS BIOGRAPHIES

Pieter van Dijkhuizen M.D.

Pieter van Dijkhuizen (MD) was born on January 9th, 1988 in Amersfoort, The Netherlands. He studied medicine at Utrecht University from 2006-2012. During medical school, he participated in an extra-curricular honours programme, which led him to join the group of Prof. Nico Wulffraat and Prof. Berent Prakken. His clinical research focused on methotrexate efficacy and intolerance in children with juvenile idiopathic arthritis. He presented the results of his research on international congresses and (co-)authored several papers, which were published in peer-reviewed journals.

After graduating from medical school, he was hired to perform his PhD studies on the prognosis of children with juvenile idiopathic arthritis, in the Marie Curie FP7 programme EUtrain (promoters Prof. Nico Wulffraat [Utrecht, The Netherlands] and Prof. Alberto Martini [Genoa, Italy]).

Privately, Pieter is interested in listening classical music, reading (theology, philosophy, ethics,) and photography.

Andrea Domenighetti, Ph.D.

I was born and, for the most part, raised in beautiful Ticino in the Italian-speaking part of Switzerland. My scientific career started at the University of Geneva in Switzerland where I obtained a Diploma/Master degree in Biology. After my degree, I moved to the Division of Hypertension at the University Hospital in Lausanne, where I joined efforts to understand the role of neuroendocrine activation in the development of heart diseases. Thanks to scholarships obtained from both industry (Roche) and academic entities (Swiss National Science Foundation and the University of Melbourne), I was able to join the Department of Physiology at the University of Melbourne in Australia, where I pursued and obtained my PhD degree. During my PhD training, I developed and used various techniques to investigate mechanisms of excitation-contraction coupling regulating cardiac muscle cells function and dysfunction. After my PhD training, I returned to Switzerland, where I spent two years working as a Research Associate in the Department of Pharmacology & Toxicology at the University of Lausanne. During this time, I successfully exchanged and implemented my skills in cardiac physiology and pathology, to study new candidate markers responsible for the development of heart failure. After receiving an advanced fellowship from the Swiss National Science Foundation, I joined the Cardiology Department at the University of California in San Diego (UCSD) in 2007, where I worked as a Postdoc fellow and then Project Scientist. At start, I focused my research on cardiac complications associated with familiar mutations of a gene called FHL1. But soon after the 2008 discovery that the same mutations were associated with muscle dystrophy in patients, I shifted my focus to the skeletal muscle system and pursued the study of FHL1-dependent skeletal muscle dysfunction with new collaborators in Orthopaedic Surgery at the UCSD. In early 2014, I transitioned my position to the Department of Orthopaedic Surgery where I now collaborate on various fields, including translational research set to identify novel mechanisms relating to muscle stem cell dysfunction in children with cerebral palsy. In July 2015 I will move to Chicago, where I will join the Rehabilitation Institute of Chicago (RIC) and Northwestern University, as Research Scientist and assistant Professor respectively. In collaboration with Northwestern University, RIC is on course to promote a research network that will integrate researchers with engineers, doctors, nurses, therapists and patients collaborating to identify real-time research breakthroughs that could translate immediately to patient care.
Chantal Duurland, M.SC.

My name is Chantal Duurland (MSc) and I am a PhD student working in the group of Prof. L. Wedderburn at University College London Institute of Child Health, United Kingdom. My PhD project focuses on the role of CD161+ Treg, which have pro-inflammatory characteristics, in immune regulation in health and disease. My PhD research is funded by the FP7 Marie Curie Initial Training Network Grant called EUTRAIN.

I studied Biomedical Sciences at Utrecht University, The Netherlands, and have a master's degree in Infection and Immunity at Utrecht University, The Netherlands. As part of my master's programme, I was an intern in the group of Prof. B. Prakken in the department of Pediatric Immunology. My project focused on the role of the PD-1 pathway in immune regulation in Juvenile Idiopathic Arthritis (JIA) and I was involved in a project examining resistance of effector T cells to suppression by regulatory T cells (Wehrens et al., 2011). In addition, I was an intern in the group of Dr. H. Cheroutre at La Jolla Institute for Allergy and Immunology, San Diego, USA. The aim of my project was to identify potential antigen(s) for CD8αα TCRαβ intra-epithelial lymphocytes (IEL).

Elizabeth Forsythe, MBBS, BMEDSCI, MRCPCH

My name is Elizabeth Forsythe and I am a clinical geneticist currently working towards my PhD. I trained in general medicine and paediatrics before starting in genetics and have held joint clinical and research posts since qualifying in medicine. I have worked on a number of research projects but in the last couple of years have focused on a group of disorders known as ciliopathies. For my PhD I am primarily working in the laboratory trying to develop genetic therapies, but I also work in the national Bardet-Biedl syndrome clinics (one of the best characterised ciliopathies). The clinical work inspires my laboratory work and it has given me the opportunity to characterise the disease further. Originally from Denmark I have lived and worked in the United Kingdom for all my adult life.
PARTICIPANTS BIOGRAPHIES

James Fullerton, MA, MBChB, MRCP

Dr Fullerton is a Wellcome Trust Clinical Research Training Fellow currently undertaking a PhD at University College London (UCL) and a Specialist Registrar in Clinical Pharmacology and Therapeutics at University College London Hospital (UCLH). His primary research interest is the aetiology and mechanistic drivers of critical illness-induced immune suppression. Dr Fullerton is investigating the contribution of a dysregulated inflammatory response, in particular resolution pathways and cyclooxygenase-derived eicosanoids, to observed innate immune effector cell impairment in the intensive care population. Through in-vivo human models of inflammation and associated ex-vivo/in-vitro assays his aim is to better stratify the critically ill at a biochemical, transcriptomic and functional level, and identify novel therapeutic opportunities that may be translated into clinical practice. Dr Fullerton gained his medical degree from the University of Birmingham in 2008, winning the Gold Medal and Chancellors Award, having previously studied Experimental Psychology at the University of Oxford where he graduated with first-class honors. He has subsequently attained his Membership of the Royal College of Physicians. He acts as a lecturer, supervisor and mentor at UCL Medical School, and helps co-ordinate post-graduate medical education at UCLH. Outside interests include roles in the Resuscitation Council (UK), playing squash, modern art and literature.

Aisha Gohar, MBChB, PhD Student

Aisha was born in Huddersfield in the United Kingdom in 1987. Growing up she always wanted to help improve the lives of others therefore chose to go to Medical school to train to become a doctor. She graduated from medical school in 2010. The first two years after graduating were spent rotating around various specialties including surgery and internal medicine. It was during this time her love for cardiology surfaced. Therefore she applied for internal medical training with the hope of training in cardiology in the future. During her two years of internal medical training, she gained her MRCP diploma in a timely manner so was given the opportunity to act up as a general medical registrar. Following these two years of internal medical training Aisha decided that she would like to expand her skills and knowledge to help her improve her clinical practice by doing a Phd prior to her cardiology specialism training. Therefore in September 2014 Aisha moved to Utrecht, the Netherlands to start her Phd in experimental cardiology, being part of the Eutrain group.
PARTICIPANTS BIOGRAPHIES

Niranjan Jeganathan, M.D.

My interest in research began during my undergraduate studies at the University of Massachusetts (Boston), where I studied biochemistry and graduated Magna Cum Laude. I worked on a project investigating the mechanisms of bacterial resistance to drugs. My training in the lab and my undergraduate major provided me with a solid foundation in biochemistry and molecular biology basics and techniques. After graduation I had the opportunity to work in the infectious disease Research and Development section of Novartis Pharmaceuticals, and was involved in investigating novel therapies and targets. This experience introduced me to the challenges of designing drugs. My interest in experiencing the impact of research from bench to bedside led me to pursue further education through medical school. After completing medical school I pursued my residency training in Internal Medicine which was followed by a fellowship in Pulmonary and Critical Care Medicine. My medical training and prior research experience have provided me with an excellent background in multiple biological disciplines including molecular biology, microbiology, biochemistry, and genetics. My clinical experience as a pulmonologist led me to the realization that there is a significant need for research in the area of lung cancer. This realization and determination to make a contribution to understanding this deadly disease led me to pursue lung cancer-related research. I hypothesized that downregulation of the protein Intersectin-1s (ITSN) has an important role in lung cancer, and proposed experiments to investigate the role of ITSN in lung cancer metastasis. I proposed my hypothesis and research plan to the Executive Committee for Research (ECOR) at Rush Medical Center and was awarded a grant. Our additional data demonstrates that ITSN regulates the cytoskeleton structure with significant implications in cancer cell migration and cancer metastasis. I was appointed as an Assistant Professor at Rush University Medical Center. The time I have spent in the lab has been very rewarding. I have identified a novel mechanism involved in the progression and metastasis of lung cancer. I am confident that my dedication to the field, knowledge and training, choice of mentor and collaborators, institutional support and most importantly my research concept will provide me with a solid foundation on which to reach my goal of understanding the mechanisms of progression of lung cancer and discover novel therapies for lung cancer.

Mahesh Kondapuram, M.SC.

Mr. Mahesh Kondapuram was born (1987) in Hyderabad, India. His interest in biology and passion towards engineering led him to pursue bachelor studies in biotechnology. His interest towards the subjects took him to get real time experience in various bioinformatics projects in various positions at Indian Institute of Chemical Technology, India. Further, he discovered his interest in Molecular biology and studied Masters in Molecular Biology and Biochemistry from Umea University, Sweden (2011-2013). During the course he worked as an intern at the department of medical biosciences in the lipoprotein metabolism research. His passionate interest in this field lead him to continue his work in research and in the year 2013, Mahesh was awarded with Marie-Curie fellowship under EUTRAIN project by European Union commission for pursuing his doctoral research in the area of Molecular Imaging of inflammatory diseases. Since then Mahesh is working as a post-graduate researcher at European Institute for molecular Imaging, where his work involves imaging the disease activity by targeting inflammation using various small animal inflammatory models. Apart from Research, Mahesh is also interested in playing badminton, travelling, photography and cooking.
PARTICIPANTS BIOGRAPHIES

Mirjam Kuhn, PharmD, PHD

After my graduation in 2004 as a pharmacist from the Eberhard-Karls-University in Tuebingen (Germany), I realised a PhD in physiology and pathophysiology of human nutrition within Nestle Clinical Nutrition and at the Paris Descartes University in Paris (France). My research was focusing on the development of new tube feedings specifically designed for the nutritional needs of elderly, oncology patients and patients requiring long-term enteral nutrition. After my PhD, I pursued my career as a medical advisor (Nestle Clinical Nutrition (France)) within the field of medical nutrition. I than moved in 2010 to Nutricia Research (The Netherlands) where I am since 2013 responsible for the research programs focusing on patients with inborn errors of metabolism and epilepsy.

Mathieu Lemaire, MSc

I have been a board-certified Pediatric Nephrologist since September 2009. Prior to medical school, I completed an MSc in Biology at McGill University. During my clinical training at the Hospital for Sick Children (HSC), I developed a keen interest in kidney diseases that relate to renal physiology—and more precisely to hypertension and tubular disorders. While contemplating a career as a clinician-scientist, it became clear to me that I would be more fulfilled if I were involved in patient-oriented research (I had done basic science research in the past). While working on a manuscript reporting on a young patient of mine with a new mutation in the vasopressin receptor, my research interests really crystallized: I realized that learning to harness the power of genomics and related bioinformatics tools would be invaluable to substantiate my current and future research interests. When I attended the Harvard School of Public Health Summer Program in Clinical Effectiveness during the summer of 2008, I carefully tailored my training program to gain a solid background in areas critical to this line of work. I did courses on many topics that would prove useful down the line: biostatistics, machine learning, study design, and clinical trials. The training that I subsequently did at Yale University (from 2009 to 2015) was the logical continuation of this beginning: In joining Dr Richard Lifton’s laboratory, I became an active member of a world-leading research team that primarily focuses on genetic and genomic aspects of renal pathophysiology. Another reason why I decided to go to Dr Lifton’s laboratory was because he helped discover many of the genes that encode many of transporters/channels that handle electrolytes in the kidney. It is in large part because of my passion for renal electrolyte physiology that I specialized in Nephrology. Ultimately, the most successful part of my stint at Yale came from an unexpected collaboration with Dr Fremeaux-Bacchi, a French immunologist with a large cohort of patients with atypical hemolytic-uremic syndrome (aHUS). Using whole-exome sequencing, we discovered that DGKE (diacylglycerol kinase epsilon) is a novel gene that causes autosomal recessive aHUS (Lemaire et al., Nat Genet, 2013). What made this finding really interesting was the fact that in contrast to all other forms of aHUS, the pathology triggered by DGKE nephropathy does not require hyperactivation of the complement system. I took a position as a Nephrologist and clinician-scientist at SickKids Hospital (University of Toronto) in August, 2014. Most of my time (80%) is spent on developing my newly established research program, which will be composed of two general streams. The first stream is gene discovery focused on rare pediatric kidney diseases using cutting-edge genomics. The second stream will aim to delineate the function(s) of the candidate genes identified, taking advantage of novel technologies for genome editing and live imaging, for example. The overarching goal that will motivate and guide our efforts is the conviction that this work could impact clinical care in the short term. I am confident that the ability to develop the “full story” locally - from patient care to gene discovery, and from pathophysiologic investigations to potential therapies - will ensure the long-term sustainability of my research program.
PARTICIPANTS BIOGRAPHIES

Steve Mangos, Ph.D

I was born and raised in Toronto, Ontario, Canada. In hopes of achieving personal growth and receiving an exceptional post-secondary education, I moved away from home for undergraduate studies at Queen’s University at Kingston, Ontario. My exposure to bench science based research occurred while completing a fourth year honor’s project in the area of cell cycle genetics using the fission yeast, *Schizosaccharomyces pombe*. This work was later extended and led to a Master of Science degree. Here, I explored the link between cyclin proteins and nutritional sensing. In wanting to satisfy my urge to study human diseases, I took a job as a research associate in a lab that studied the role of cytochrome P450 activity during murine lung tumor development. After a short break from academia to pursue business interests, I enrolled in a PhD program at the University of Western Ontario in London, Ontario, Canada. It was here that I was first introduced to the highly versatile vertebrate model, the zebrafish *Danio rerio*. My dissertation work went in many directions, but most work was focused on studying what role a particular tumor suppressor played during early development. Knowing that I would continue to focus on using the zebrafish to study human disease, I landed a postdoctoral position at Massachusetts General Hospital where I would focus on polycystic kidney disease. This experience convinced me of the important role that this model organism could play in researching human diseases. Important professional contacts were forged, leading to my recruitment at first to the University of Miami’s Miller School of Medicine, and then to my current position at Rush University Medical School, where I continue my work using the zebrafish to study renal disease.

Boris Le Nevé, PhD

My strong interest in studying the relationship between nutrition and health has always been driving my professional path. Starting with a broad life sciences education in France with both academic and industrial trainings, I gained expertise level in human nutrition physiology through my PhD thesis in Germany within the European project Nusisco (nutrient sensing in satiety control and obesity). This 4 years project has allowed me to develop my basic understanding of human neurogastroenterology and my skills as project manager. This very rich experience, including a 7 months deep-dive as research scientist in food industry (Unilever R&D center, Netherlands), has also helped me to start building an international network. Since 2011, back in France as a clinical scientist and project leader for Danone Research, I am at the interface between the company and our international academic collaborators. Having the unique opportunity to interact with both internal and external experts in this stimulating research environment is a privilege I enjoy every day. My current focus is on developing clinical models and tools that will help demonstrating the benefit of new food products in the digestive health area.
Virginia Newcombe, BSC, MPHIL, MBBS, MRCP, FCEM, PhD

Originally from Australia Virginia Newcombe moved to the United Kingdom in 2004 to complete a PhD investigating the use of diffusion tensor imaging in traumatic brain injury (TBI) at the University of Cambridge. She is currently finishing her clinical training in Intensive Care and Emergency Medicine at Addenbrooke’s Hospital, Cambridge. In recognition of her research in 2011 Virginia was awarded a Junior Fellowship of the International Society for Magnetic Resonance in Medicine as well as the Niels Lassen Award of the International Society for Cerebral Blood Flow and Metabolism. Since 2014 Virginia has held an Academy of Medical Sciences/Health Foundation Clinician Scientist Fellowship which allows her to combine her clinical work with research. She also holds positions as a Fellow of Wolfson College, Cambridge and an Associate Editor for the Emergency Medicine Journal. Virginia’s current research focuses on the development of prediction models of outcome after TBI using magnetic resonance imaging. This project is linked with CENTER-TBI, a large European project that aims to improve care for patients with TBI (https://www.center-tbi.eu/). It is hoped that this research will allow for more advanced imaging techniques to move from being purely research tools to being used in clinical practice.
Frank Nijsen, Ph.D.

Frank Nijsen, Ph.D., is Associate Professor of Radiology and Nuclear Medicine at the University Medical Centre of Utrecht (UMC Utrecht) and is the leading person in the valorisation of one of his inventions, the holmium microspheres for treatment of liver malignancies. He is one of the two founders of Quirem Medical BV and is working part-time as Scientific Officer (0.2 fte) in this UMC Utrecht spin-off company.

His research focuses on particle based imaging and therapy of malignancies (liver, brain and head-and-neck tumors). Developing imaging agents for visualization drug release, biodistribution, dosimetry and drug clearance with clinical nuclear, MR and CT imaging modalities is an important part of his research. In the last 20 years he and his research group developed and investigated nano- and micro particles for internal radiotherapy and slow release of chemotherapeutic agents. The radioactive particles for therapy of tumors are classified as medical devices. The medical applied research is performed in close cooperation with the medical specialists (nuclear physician, oncologist, interventional radiologist etc.), pharmacy, veterinary medicine and several healthcare companies. His research fits into a bench-to-bedside approach of translational research. Franks’ final goal is to valorise research and techniques to make it available for patients and the community. His team currently consists of one postdoctoral researcher, three PhD students and two technicians.

Educational Background: Frank Nijsen holds a doctorate in both biology (Tropical ecology) and Medical Biology at the University of Amsterdam, which he completed in 1995. He did his Ph.D. defence on “Radioactive holmium poly(L-lactic acid) microspheres for treatment of liver malignancies” at the University of Utrecht; 26 April 2001. He was trained in radiation protection at class 3 in 1994 which permits him to work and supervise personnel at a radiation laboratory. In 1995 he received his Laboratory animal expert licence, article 9 which allows him to setup animal studies and work with laboratory animals.

Employment: In 2001 he started as Post-doc at the Department of Nuclear Medicine, UMC Utrecht to continue the Holmium project. In 2004 he received his Assistant Professor position at the Department of Nuclear Medicine and Radiology, UMC Utrecht and became in 2012 Associate Professor at the Imaging Division, UMC Utrecht. In 2013 he started the Quirem Medical company, wherein he works part-time as CSO.

Teaching Experience and Honors: Frank Nijsen supervised 6 Ph.D. students and is teaching students (medical and medical biologists) on a regular base on radiopharmaceuticals and on the introduction into translational research and valorisation. He and his team were awarded with the prestigious “CIRSE 2014 Excellence and Innovation Award” in Interventional Radiology in Glasgow. In 2013 he won the BioBusiness Masterclass 2013 with his business plan for Quirem Medical.

Publications: Frank’s research investigates new therapeutic nano- and micro particles for internal radiotherapy and slow release of chemotherapeutic agents. He published over 60 articles in peer-reviewed journals and holds as inventor many patents in the field. He started to publish in 1994 the concept on holmium microspheres in the European Journal of Nuclear Medicine. Since 2009 these particles were tested in patients with liver malignancies for the first time, which resulted in 2012 in a in the Lancet Oncology. The Holmium microspheres are currently tested in a phase-2 efficacy study (35 patients treated of 36 patients in total) after successful completing the phase-1 study (15 patients).
PARTICIPANTS BIOGRAPHIES

Joseph Park, M.D., Ph.D.

I was born in Southern California and knew from a relatively young age that I wanted to become a physician. However, as I progressed through my studies, the specifics what that career would look like continued to evolve. After completing my undergraduate degree in Molecular Biology from Pomona College, I spent time at the National Institutes of Health working in the laboratory of Dr. Ellen Sidransky to understand the phenotypic heterogeneity in patients with Gaucher disease. This was my first taste of translational medicine and it shaped my training trajectory. I then moved to Dallas to pursue my medical and doctorate degrees at the University of Texas Southwestern Medical Center. While there, I began to develop my long-term career interests in the areas of pediatric medicine and stem cell biology. My graduate work was in the laboratory of Dr. Dennis McKearin and focused on studying the intrinsic and extrinsic molecular signals that control stem cell fate. After earning my M.D. and Ph.D. degrees, I then continued with my medical training as a pediatric resident at Children’s Medical Center Dallas. Afterwards, I chose to pursue subspecialty training in pediatric hematology/oncology at Stanford University, where I am currently a secondyear clinical fellow. I am also continuing my research in the labs of Drs. Erinn Rankin and Amato Giaccia, which focuses on the role of hypoxia-mediated signaling in the hematopoietic niche in both malignant and non-malignant conditions. It is my hope that the molecular discoveries that I uncover in the laboratory will lead to the identification of new therapeutic modalities. My cumulative experiences have guided me toward pursuing a career in translational medicine and to become a leader in the field of pediatric hematology/oncology. I hope to take the discoveries from my research and make connections with other leaders in academia and in industry to generate new treatments that can be applied in the clinic. My medical training and research expertise will allow me to play an integral role in all aspects of this vision.

Sara Parker, B.SC.

Sara Parker is a doctoral candidate in her fourth year of studies at the University of Arizona in the department of Cellular and Molecular Medicine. Her current research focuses on cellular polarity, the molecular mechanisms underlying axon formation during neuronal development, and how epithelial polarity is maintained in health and lost during cancer progression. Her interests are in cellular neurobiology of the synapse, and she hopes to study memory storage and neurodevelopmental disorders as a post-doctoral researcher.
PARTICIPANTS BIOGRAPHIES

Teresa Rodriguez-Calvo, D.V.M., Ph.D.

I was born in Madrid, Spain, where I studied Veterinary Medicine at Complutense University (UCM), Madrid, Spain. I did my PhD in Veterinary Sciences at the Research Center for Animal Health (CISA) in Madrid. In this BSL-3 facility, I acquired my passion for viruses and I focused my research on Immunology and Virology, studying the immune response against Foot and Mouth Disease Virus (FMDV) and Bluetongue Virus (BTV) and specifically the role of dendritic cells during the course of infection. Having being exposed to animal diseases and the use of animal models to better understand human pathology, I moved forward into human research and became interested in the role of viruses on human diseases. I am currently doing my postdoc at La Jolla Institute for Allergy and Immunology, San Diego, United States, under the supervision of Professor Matthias von Herrath. The Institute is dedicated to increasing knowledge and improving human health through studies of the immune system. In our laboratory we closely collaborate with The Network for Pancreatic Donors with Diabetes (nPOD), which was establish with the idea of providing valuable tissues from healthy and diabetic donors in order to answer basic questions about the pathogenesis of Type 1 Diabetes (T1D), and ultimately prevent, reverse and cure the disease. Thanks to the nPOD program, we can study human tissues like pancreas, spleen and lymph nodes from donors with T1D in order to determine if the T cells identified in mouse models (T cells reactive against insulin-producing-beta cell proteins or autoreactive T cells) also destroy beta cells in human T1D and how is their distribution and activation status in the pancreas and in other tissues. I have been studying the distribution of CD8 T cells, the main cell type implicated in the destruction of insulin-producing beta cells. We have found that these cells infiltrate the exocrine pancreas in high numbers and we are very interested in understanding how this could contribute to the pathogenesis of the disease. We are also trying to elucidate whether viral infections make the islets of Langerhans more accessible for these destructive, autoreactive T cells or vice versa. For this work performed at Prof. von Herrath’s laboratory I recently received the nPOD Young Investigator award 2015. Now we have the ability to investigate the pathogenesis of type 1 diabetes and to question the most basic dogmas. Having the opportunity to study human tissue is very motivating and challenging; every small detail matters and every single piece of information might approach us to a cure for type 1 diabetes.

Sytze de Roock, PhD

Sytze was trained as a Biologist in Utrecht (The Netherlands) and Perth (Australia) from 1997 till 2002, and specialized in plant physiology. Between 2002 and 2007 he worked as a Research and Development Officer in product development in pharmaceutics. In 2007 he started his PhD with Prof. Berent Prakken in Paediatric Immunology, Wilhelmina Children’s Hospital, Utrecht, focusing on the development of the human immune system early after birth and the effect of gut microbiota herein. After obtaining his PhD in 2012, he worked as a post-doc in Paediatric Rheumatology with Prof. Prakken and Prof. Wulffraat on several projects, including mesenchymal stromal cell therapy in Juvenile Arthritis (JIA), pharmacovigilance and efficacy of biologicals and biomarker discovery in seronegative arthritis forms. Moreover, he supervises PhD and MSc students in laboratory projects on the role of alarmins in the pathology of systemic JIA.
PARTICIPANTS BIOGRAPHIES

Suhrud Rajguru, Ph.D

Born in Mumbai, India, I completed my undergraduate education at the University of Mumbai and earned a Bachelor of Engineering degree in Biomedical Engineering. To develop my research interests further, I attended the University of Utah in the United States and earned a Doctor of Philosophy degree in Bioengineering. During this time, I was able to develop mathematical and experimental models of one of the most common balance disorders under mentorship of Dr. Richard Rabbitt. These models have allowed us to quantify the pathological responses observed from conditions associated with severe vertigo and improve our understanding, diagnosis and treatment of a debilitating vestibular disorder. Prior to joining the faculty at University of Miami in the Departments of Biomedical Engineering and Otolaryngology, I was a postdoctoral trainee at Washington University in Saint Louis and at Northwestern University, Chicago. During my research training and now as an independent faculty member, I have strived to make original contributions to the fields of inner ear biology with particular emphasis on balance and hearing disorders. My current research interests are in developing novel applications of optical stimuli in neural implants. Application of such stimuli in modulating intracellular signals may be particularly useful to study events controlling synaptic transmission or excitation–contraction coupling. I am also developing application of therapeutic hypothermia for neuroprotection and protection of residual hearing function in patients undergoing surgical cochlear implantation. This is truly an exciting time for biomedical research with new innovations and discoveries that promise significant benefits to our societies. I want to play a role in translating research ideas into clinical applications that will directly benefit patients and improve human health by collaborating with industry partners and bridging the gap between academia and industry.
Sabine van Dijk, PH.D.

In high school, as part of reforming the Dutch education system, my class was the first to participate in a new curriculum for pre-university level high school students. As a consequence, I as required to choose a major, but no one individual major covered both classes I was most interested in: advanced biology and chemistry. Thus, I took two majors: (1) Nature & Technique with a focus on physics and chemistry, and (2) Nature & Health with a main focus on biology and some biochemistry. In the end I graduated with two high school diplomas, and I had learned that my interest in beta-sciences leaned more towards biology.

I attended Leiden University (Leiden, the Netherlands) to study Biomedical Sciences, a broad program covering multiple specialties and techniques. Upon graduation in 2004 I continued in the Master’s program to deepen my knowledge of Biomedical Sciences. During my Master’s I interned in cancer biology, nephrology, virology and even taught high school biology. I graduated with a specialization in research in 2006. During my dissertation research at the Department of Virology of the Eijkman-Winkler Institute for Microbiology, Utrecht University, my supervisor left and my professor gave me a lot of freedom to finish the project. This wonderful opportunity showed me many facets of research, and I greatly enjoyed the experience of collecting and interpreting data, designing additional experiments and, finally, writing the manuscript. Therefore, I decided to pursue a PhD.

When interviewing with Drs. Stienen and Van der Velden at the Institute for Cardiovascular Research at the VU University Medical Centre (Amsterdam, the Netherlands), I immediately got fascinated by their projects as I have always had a special interest in muscle function. Moreover, the translational relevance of the research appealed to me. During my PhD I studied the pathophysiology of hypertrophic and dilated cardiomyopathies. My projects focused on the genetics in combination with the biochemical profile and function of the sarcomeres of cardiac biopsies from patients in order to determine molecular mechanisms relevant to cardiomyopathies. We were particularly interested in how diverse mutations in the thick filament accessory protein cardiac myosin binding protein C may disrupt its function and lead to disease. We were the first to demonstrate that truncating mutations lead to less protein in the patients, which potentially could lead to cardiac dysfunction. Additionally, we were able to link certain functional alterations in force development to the primary disease, while others were a common result of cardiac remodeling independent of the trigger.

To increase my knowledge in molecular biology, I contacted Dr. Harris to do a post doc and I am currently in her lab. My projects are focused on the functional meaning of a range of domains in the N-terminal part of myosin binding protein C. In my current research I use a combination of molecular biology, biochemistry and animal models to tease out how cardiac myosin binding protein C exerts its functions and what its relevance is to cardiac performance in health and disease.
PARTICIPANTS BIOGRAPHIES

Seet Li Fong, Ph.D.

I am a Senior Research Scientist at the Singapore Eye Research Institute (SERI), and an adjunct Assistant Professor at the National University of Singapore and the Duke-NUS Graduate Medical School. I have been leading projects pertaining to the discovery of therapeutics and biomarkers under the Ocular Therapeutics and Drug Delivery research program for the last 5 years. The success of these projects has led to renewed funding under the current EyeSite Translational and Clinical Research (TCR) grant awarded to SERI for 25 million dollars from 2013 to 2018. My present research interests are focused on the discovery and development of next-generation anti-fibrotic compounds and biomarker detection for ocular and other fibrotic conditions. Prevention of scarring after glaucoma surgery is a clinical need that requires vast improvement. Prior to joining SERI, I was engaged in biomedical industry research at Viacell Singapore Pte Ltd, a former research arm of ViaCell, Inc. (Cambridge, USA). I was group leader of a team in search of improved cellular therapeutic applications for cord blood stem cells. To this end, we have made progress in improving the transplantation potential of these cells via modification of the culture environment of cord blood cells. Before Viacell, my cell biology skills were honed in the protein trafficking laboratory of Professor Wanjin Hong at the Institute of Molecular and Cell Biology, Singapore. While here, I characterized the biology of a gene which we have named Endofin. I have also received postdoctoral training in the Amgen Research Institute (Toronto, Canada). In my time there, I discovered new isoforms of the then newly identified gene, synaptotanin 2. I am also a biochemist by training, having received my DPhil from the Department of Biochemistry, University of Oxford (United Kingdom). My doctoral dissertation focus was the expression, purification and characterization of fibroblast growth factor-9 (Fgf9). Looking ahead, I am excited about the opportunities to help lead the development of new therapeutics as well as minimally invasive diagnostic tests for ocular fibrosis in SERI.

Sng Ban Leong, MBBS, MMED, FANZCA, FFPMANZCA, MCI

Dr Sng Ban Leong, is the Deputy Head and Senior Consultant at the KK Women’s and Children’s Hospital, Women’s Anaesthesia. He is an Assistant Professor at the Duke-NUS Graduate Medical School and also a Clinician-Scientist Mentor and Core Faculty in the Singhealth Anaesthesiology Residency Programme. He recently received the National Medical Research Council (NMRC) Clinical Trials Grant for obstetric epidural delivery system research, NMRC Transition Award for chronic pain research and Singhealth Foundation Grant for vasopressor delivery system research. He completed the Masters in Clinical Investigation with the National Research Foundation-MOH Healthcare Research Award and Fellowship in Pain Medicine with the Healthcare Manpower Development Plan award. His research interests include obstetric epidural analgesia, closed-loop systems, chronic post-surgical pain and the use of supraglottic airway for general anaesthesia in Caesarean section.
Joost Swart, MD, is a board certified paediatrician immunologist & rheumatologist. After receiving his MD (cum laude/ with Honour) from the University of Groningen in 1999, he finished his training as a paediatrician at the VU Medical Center in Amsterdam in 2006. His fellowship paediatric rheumatology-immunology was completed in 2008 in Utrecht. He worked as a paediatric rheumatologist for 3 years in both Reade and the VUmc in Amsterdam. In 2011 he came to work in the largest Dutch group of Pediatric Rheumatology / Immunology based in Utrecht. He is member of the Paediatric Educational Committee in Utrecht (PAOK-committee) and educates students in both the CRU and Summa medical curricula in Utrecht and lectures nurses in the Amstel Academy. He trains interns, residents and fellows in paediatrics and rheumatology in UMC Utrecht. He is a certified instructor on the APLS-course from the Advance Life Support Group in Belgium.

He is doing a PhD on the effect of mesenchymal stem cells in proteoglycan induced arthritis and has now started a phase I/II pilot-study in JIA-patients. Furthermore he is researcher and member of the Steering Committee of the international Pharmacovigilance database Pharmachild with over 9000 JIA-patients who have contributed their clinical data and over 1,000 blood and synovial samples. He won a Pfizer Aspire-grant to investigate the treatment-results measured by JADAS-scores in JIA patients in Utrecht. He hopes to finish his PhD in the end of 2016.

He is member of the Dutch Rheumatology Association, Dutch Association for Paediatric Rheumatology, Paediatric Rheumatology European Society, Pediatric Rheumatology International Trial Organization and the Dutch Association against Quackery.

Cynthia Yu-Wai-Man, MBBS, FRCOphth was awarded a prestigious British Council International Scholarship by the Cambridge University Examination Board (2000-2005), and graduated in medicine from the Newcastle University in 2005. During her undergraduate research period at the Institute of Genetic Medicine, she has identified a novel heterozygous mutation in the POLG2 gene in autosomal dominant Progressive External Ophthalmoplegia and published her work in the American Journal of Human Genetics, one of the highest impact factor journals in human genetics.

Dr Yu-Wai-Man became a Fellow of the Royal College of Ophthalmologists in 2013, and she was awarded a prestigious NIHR UCL BRCs Francis Crick Institute Clinical Research Fellowship (2014-2017). Her research focus is translational anti-fibrosis eye research and her long-term ambition is to develop novel anti-fibrotic treatments that will lead to patient benefit in the future. She is currently studying important gene transcription pathways in ocular fibrosis, and she has already set up key collaborations at Michigan State University and the UCL Centre for Gene Therapy to develop novel classes of small molecule anti-fibrotic therapeutics in the eye.

Dr Yu-Wai-Man has been awarded several national and international prizes for her research, namely the Royal College of Ophthalmologists Research Prize (2011), the American Academy of Ophthalmology Poster Prize (2010), the International Ophthalmology Society Research Prize (2012), and the North American Neuro-Ophthalmology Society Oral Presentation Prize (2013). She gave the invited lecture at the UCL Clinical Academic Trainees Meeting in 2014, and her paper ‘The role of the MRTF-A/ SRF pathway in Ocular fibrosis’ has been ranked among the Top 10 most viewed papers by the Association for Research in Vision and Ophthalmology in 2014.
My name is Lilly Verhagen, I am 31 years old and I live in Utrecht, The Netherlands. During my medical studies, I spent six months in Central America where I performed a research on the impact of Dengue viral infections on public health related topics at the Ministry of Health in Guatemala. Furthermore, I spent five months in the Sumve District Designated Hospital in Tanzania for my senior internship. After obtaining my Medical Degree in 2009, I went to Venezuela where I lived and worked for 3.5 years, combining clinical work as a medical doctor with the elaboration of my PhD project on respiratory infections in Venezuelan indigenous children. During this period, I lived alternately in Caracas, the capital city, and in the Orinoco Delta. The Orinoco Delta is inhabited by the Warao people, an indigenous geographically isolated population that lives under precarious sanitary conditions in wooden houses raised on piles along the Orinoco river banks. In this area without electricity supply or phone connections I worked together with Venezuelan pediatricians and Venezuelan and Dutch medical students and laboratory workers. In preparation for and during my PhD study, I followed courses in Childhood tuberculosis epidemiology, prevention, diagnosis and management (Cape Town, South Africa), data analysis on gene expression arrays (Erasmus MC Rotterdam), applied tuberculosis research (Paris, France), writing qualitative research articles (Kuala Lumpur, Malaysia), biostatistics and regression analysis (Erasmus MC Rotterdam) and modern trends in childhood infectious diseases and immunology (Sevilla, Spain). Although I have always very much enjoyed working in a tropical rural setting, with time I became frustrated that I often couldn't get to the bottom of the problems I was addressing with my research projects due to practical and logistical limitations. Since March 2014, I am working as a pediatric resident in the Sint Antonius Hospital Nieuwegein / Wilhelmina Children's Hospital Utrecht. During my pediatric training, I became fascinated by the burden and devastating effects of respiratory infections also in the Dutch pediatric society, specifically in risk groups such as children suffering from immune deficiencies. Since the beginning of this year, I am therefore combining my residency with a research project on microbiome and gene expression studies in Dutch children with a primary immune deficiency. The combination of treating today's patients as a physician and, at the same time, tomorrow's patients as a scientist unraveling the pathogenesis and characteristics of pediatric diseases has inspired me to combine my research activities with clinical work as a physician during the past years. When I am not working, I enjoy dinner parties with friends or quiet evenings at home with a nice movie. My boyfriend with whom I live in Utrecht is a golf instructor. Although I do not play golf, we both enjoy outdoor sport activities, preferably biking or surfing (when it's not too cold).
Alice Zemljic-Harpf, M.D.

Dr. Alice E. Zemljic-Harpf obtained her medical degree at the University of Graz, Austria, in 1997. She completed her postdoctoral training at the Cedars-Sinai Medical Center, Los Angeles, and at the University of California, Los Angeles. In 2003 she moved to the University of California, San Diego. She currently holds a faculty level position in the Department of Anesthesiology and the Cardiac and Neuro Protection Laboratories, at the University of California, San Diego.

Recently, Dr. Zemljic-Harpf advocates the use of genomic-based healthcare to predict the therapeutic value of certain drugs as well as their potential increased drug toxicity to tailor individual treatment options to the patient’s genome. Her research investigates molecular pathways leading to heart failure and cardiac arrhythmias, with the ultimate goal to design novel approaches for the prevention and treatment of cardiac dysfunction.
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