EUREKA
Institute
International Certificate Program
April 8th - 14th, 2018
Siracusa, Italy
EUREKA Institute

International Certificate Program
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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

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 our partners: University Medical Center Utrecht, SingHealth Duke–NUS Academic Medical Centre, University of Arizona, University of Miami, Stanford University Medical Centre, University of Toronto and supporters: University College London, Parent Project Muscular Dystrophy, Danone Nutricia Research, Nature Medicine and Nature Medicine Biotechnology.

We deeply appreciate the Faculty for the 2018 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.

In addition, we thank Anna van Suchtelen and Brian Goeltzenleuchter for contributing their time and passion in cultivating the 2018 Translational Creativity program. Lastly, we thank Francesco Italia, Vittorio di Natale, and their colleagues at the Borgia del Casale for their extraordinary efforts, and for the beautiful space in which the course is held.

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Edited and compiled by The Eureka Institute for Translational Medicine

A publication of the Eureka Institute for Translational Medicine. Prepared in the partial fulfillments of the requirements for the certificate of completion. Continuing Medical Education credits are not being offered for this course, however the materials are in compliance with the requirements of the Accreditation Council for Continuing Medical Education. Course materials and handouts include edited and compiled works of multiple authors.

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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 77,000 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.

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 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 predefined 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). 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 daily throughout the course and should be submitted by the end of the course.
Eureka Faculty Roster - April 2018

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

Carol Gregorio, PhD
Luxford/Schoolcraft Professor, Vice Dean for Innovation and Development, Professor and Head of Cellular and Molecular Medicine, Co-Director, Sarver Heart Center, Director, Molecular Cardiovascular Research Program, College of Medicine @ The University of Arizona

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

David Hafler, MD
William S. and Lois Stiles Edgerly Professor of Neurology and Immunobiology, Chairman, Department of Neurology, Neurologist-in-Chief, Yale-New Haven Hospital

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

Roos de Jonge, PhD
Advisor patient participation, Educational Centre, UMC Utrecht

Daria Mochly-Rosen, PhD
The George D. Smith Professor for Translational Medicine in the Department of Chemical and Systems Biology, Founder and Co-Director of SPARK, Stanford University School of Medicine

Patrick Maxwell, MD
Regius Professor of Physic and Head of the School of Clinical Medicine, University of Cambridge

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

Luigi Naldini, MD, PhD
Director, San Raffaele Telethon Institute for Gene Therapy, Professor of Tissue Biology, “Vita - Salute San Raffaele” University Medical School, Milan, Italy

Kiran Nistala, MD, PhD
Director, Experimental Physician, Immunoinflammation therapeutic area, GSK Medicines Research Centre And Honorary Consultant in Paediatric Rheumatology, Great Ormond Street Hospital

Berent Prakken, MD, PhD
Vice-dean and Director of the biomedical education center, Professor of Paediatric Immunology, University Medical Center Utrecht

Sergio A. Quezada, PhD
Group Leader, Immune Regulation and Tumour Immunotherapy Lab CRUK Senior Cancer Research Fellow UCL Cancer Institute

Norman Rosenblum MD, FRCPC
Professor of Paediatrics, Physiology, and Laboratory Medicine and Pathobiology; Tier I Canada Research Chair in Developmental Nephrology; SickKids and University of Toronto; Scientific Director, CIHR Institute of Nutrition, Metabolism and Diabetes (INMD)

Maria-Grazia Roncarolo, MD
George D. Smith Professor; Division Chief, Paediatric Stem Cell Transplantation and Regenerative Medicine; Director, Center for Definitive and Curative Medicine (CDCM); Co-Director, Institute for Stem Cell Biology and Regenerative Medicine; Co-Director, Bass Center for Childhood Cancer and Blood Diseases; Department of Paediatrics, Stanford School of Medicine

Hester den Ruijter, PhD
Associate Professor Experimental Cardiology, Laboratory of Experimental Cardiology, University Medical Center Utrecht, The Netherlands.

Salmaan Sana
Educational Program Designer Facilitator - Consultant Meaningful Learning Specialist

Vicki Seyfert-Margolis, PhD
Founder and CEO, My Own Med, Inc.

Rosalind L Smyth, CBE, FMedSci
Director, UCL Great Ormond Street Institute of Child Health; Non-Executive Director, Great Ormond Street Hospital; NHS Foundation Trust

Anna van Suchtelen, MA
Artist, Writer

Anita Small, MSc, EdD
Founder and owner of Small Language Connections

Nancy Sweitzer, MD, PhD
Professor of Medicine; Chief of Cardiology; Director, Sarver Heart Center, University of Arizona; Editor-in-Chief, Circulation: Heart Failure
Ambassadors

Charles B. Cairns, MD
Dean, College of Medicine – Tucson
Professor, Emergency Medicine
The University of Arizona

Pierce Chow, MMS MMed, FAMS, FRCSE, PhD
Professor and Course Director, Duke-NUS Medical School;
Senior Consultant, Surgical Oncology, National Cancer Centre
Singapore; Senior Consultant, HPB/Transplant, Singapore General
Hospital; Research Director, Institute of Cell and Molecular
Biology; Protocol Chair, Asia-Pacific Hepatocellular Carcinoma
Trials Group; Adjunct Senior Group Leader, Genome Institute
of Singapore

Tuula Kalliomäki, MBA, PhD
Assistant Professor, Department of Medical Imaging, Faculty
of Medicine, University of Toronto; Manager, Business
Planning & Operations, Toronto General Hospital Research
Institute, University Health Network

Norma Sue Kenyon, PhD
Martin Kleiman Professor of Surgery, Microbiology and
Immunology & Biomedical Engineering, Diabetes Research
Institute, Chief Innovation Officer, Leonard M Miller School of
Medicine, Vice Provost for Innovation, University of Miami

Moni Kim, MPH, BASc
Community Partnerships & Program Manager, Translational
Research Program, Institute of Medical Science, Faculty of
Medicine, University of Toronto

Susanne van Weelden, PhD
Director Internal Affairs Utrecht Life Sciences,
Utrecht University/University Medical Center Utrecht

Introduction e-learning module for Translational Medicine

The Eureka course started with an online introduction prior to the
face-to-face course in Siracusa since the 2014 course. The course
was developed by the Eureka faculty members Juan Carlos Lopez
and Sylvia Brugman (a 2010 Eureka alumni), 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 UMC Utrecht.

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.
Sunday, April 8th

Coffee
Time: 8:15 - 8:30

Welcome and introductions
Facilitator: Janet P. Hafler
Time: 8:30 - 10:00

Introduction of curriculum
Facilitators: Norman Rosenblum and Carol Gregorio and Kiran Nistala
Time: 10:00 - 10:10

Break, 10:10 - 10:30

Mapping Translational Medicine
Presenters: Berent Prakken and Salvatore Albani
Time: 10:30 - 12:30

Abstract
In this session, the objectives of the course and concepts of translational medicine will be introduced and defined also by leveraging on personal experience.

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

Group Lunch, 12:30 - 13:30

Sisyphus – A Study in Hopes, Dreams and Reality
Authors: Salvatore Albani with Norman Rosenblum
Time: 13:30-14:30

Abstract
Sisyphus is a real-life case about the development of a therapeutic compound for humans. The case highlights the translational pathway and highlights both typical and atypical challenges that must be addressed at the level of science, networking, regulation, funding, and professional activity.

Objectives
1. To review the translational itinerary in the context of a real life non-standard case.
2. To begin to develop a personal learning agenda to be used as a map for this course.
3. To introduce group-based problem solving and collaboration.

From Discovery to Clinical Trial: the Translational Pathway
Presenter: Maria Grazia Roncarolo
Time: 14:30 - 15:30

Abstract
Investigators developing technologies in an academic setting need to have the tools to evaluate the options that are available to them, when to utilise academic resources, and when to seek other options. This session will examine the TM itinerary in relation to the respective roles of academia, IP, patents and technology transfer.

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

Break, 15:30 - 15:45
Sunday, April 8th cont.

**Communication Styles Reflection:**
*discover your Style*
Facilitator: Anita Small  
Time: 15:45 - 16:00

Interactive Style Questionnaire distributed

**The Patient in Translational Medicine**
Presenter: Anita Small  
Time: 15:45 - 16:00

**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. As parents, we have few choices and by default, necessarily become an advocate. We search the internet, sign up for Google alerts, connect on FB and Twitter. We join registries or develop new ways to collect qualitative and quantitative data. We travel across the world to identify physicians with expertise and interdisciplinary care. We solicit interested researchers to characterize the disease of interest. We start foundations, partner with industry and fund start-up companies. We become caregivers, caretakers, investors and partners. We are the new generation: Citizen Scientists. We educate family, extended family, school, community and every individuals that crosses our path. We learn the language of science, drug development and medicine. We drive regulatory change and healthcare policy. We are aggressive, fearless and effective. Our only interest is to change the world.

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

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**Sunday Social Program**

19:00 Tour of the Borgia del Casale

19:30 Opening Dinner @ Porta Marina - de Salvo, via dei Candelai, 35, Ortigia  
(Gather at Borgia, 5 min walk)

Please join us to celebrate the 10th Annual International Certificate Program in Translational Medicine
Monday, April 9th

Coffee
Time: 8:15 - 8:30

Personal Goals, Translational Medicine Vision, Communication Strengths and Team Building
Program Designers: Salmaan Sana and Anita Small
Facilitators: Salmaan Sana, Anita Small and Kiran Nistala
Time: 8:30 - 16:30

Abstract
A goal of our program is to address developing collaborative skills that may be applied to translational medicine. This series of activities provide the opportunity to reflect on personal strengths and group processes that can be used to address translational medicine concerns.

In this particular part of the program, you will learn how to develop your personal skills within groups, to lead collaboratively and more effectively as a team and to translate your learning into meaningful practice in translational medicine. It simultaneously focuses on encouraging you to realize your potential impact. You will work in teams and find ways of utilizing your talents as well as supporting others in using theirs. Becoming aware of your role on a team and team function is directly related to the potential impact you and your colleagues can have.

The session is broken up into the following themes:
Connect Before You Lead (morning)
What does success in translational medicine look like? (morning)
Develop your plan (morning)
Communication styles (afternoon)
Learn how to work collaboratively and bring others with you (afternoon)
Resilience and flourishing (afternoon)
Feedforward (afternoon)
Wrap up/ reflection (Saturday)

Objectives
1. Reflect on personal skills related to your goals in translational medicine.
2. Refine your teamwork skills.
3. Develop skills to work collaboratively in interdisciplinary teams within a translational medicine context.

Group Lunch, 12:15 - 13:30
Monday, April 9th cont.

Break, 16:30 - 17:00

Introduction of Presentation Workshop
Facilitators: Carol Gregorio and Nancy Sweitzer
Time: 17:00 - 17:45

Keynote encounter I
Dr. Daria Mochly-Rosen: SPARK Translational Research Program
Time: 17:45 - 19:00

Abstract
“From Bench to Bedside, how to translate academic research and drug development”

While science and technology are now more innovative and successful than ever, their translation into novel treatments and therapeutics to address key health problems remains a challenge. Recognizing that to close the industry/academia divide, we created the SPARK AT Stanford program, in which scientists from both sides work more closely together. SPARK, created twelve years ago, is a partnership between Stanford University and volunteers from the local biotechnology, pharmaceutical, and health care investment industries. SPARK’s mission is three-fold: first, to help academic investigators overcome the obstacles intrinsic to moving research discoveries from bench to bedside; second, to educate faculty and trainees about the translational research process so that development of promising new discoveries becomes second nature, and so that trainees are better prepared for potential industry careers; and third, to promote efficient, cost-effective, and innovative approaches to discovery and development. So far, 60% of the ~100 projects have been licensed to companies and/or entered clinical trials. Through weekly meetings, SPARK’s activities conducted on campus, provide a rich learning experience that is open to faculty, staff, students, and postdoctoral fellows; this ensures that the know-how remains here and that the out-of-the-box and risk-taking attitude of academia is maintained, while industry’s real-life experience is implemented. We are ‘exporting’ SPARK to other academic institutions and formed a Global SPARK community to promote translational research in over three dozen academic institutions on five continents.

I will discuss how SPARK works within the barriers to translating our academic discoveries, what academia can do about them and how my own experience in moving findings from my academic basic research lab to a startup and approved drug has changed what I currently do.
Tuesday, April 10th

Coffee
Time: 8:15 - 8:30

Debriefing
Facilitators: Janet P. Hafler and Berent Prakken
Time: 8:30 - 9:00

Modeling diseases and therapies in experimental systems
Presenters: Norman Rosenblum
Time: 09:00 - 10:00

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, 10:00 - 10:15

The concept of druggability: Challenges and Opportunities
Presenter: Salvatore Albani
Time: 10:15 - 11:30

Abstract
This encounter will distill from the keynote encounters of the previous day the common elements related to identifying, nurturing and developing an idea. The content will evolve from self biographic to more analytical and objective. Specifically, the concept of what makes a discovery attractive for translational developments, what it takes, with whom one associates, what objective parameters are considered by the various stakeholders will be defined.

Group Lunch, 11:30 - 12:30

Contemporary Clinical trials I: Pre-Market Product Development: Interactive exploration of clinical trial design
Presenters: Vicki Seyfert-Margolis and Nancy Sweitzer
Time: 12:30 - 14:15

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 on-going 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.
Tuesday, April 10th cont.

In session break

Contemporary Clinical trials II:
Post-Market analysis/Companion: Basic clinical trials/pragmatic trials
Presenters: Nancy Sweitzer and Vicki Seyfert-Margolis
Time: 14:15 - 15:15

Abstract
Developing a new medical product today not only means getting an approval from a regulatory agency. Increasingly the action for successful marketing of new medical products has shifted to the world post-approval. We will explore what the post-market world means for successfully bringing a new product to patients and for continuing to monitor how well the product works in real world medical practices. We will also discuss new models of approval that incorporate more real world post-market research into an evolving approval process.

Ambassador representative session
Facilitators: Norman Rosenblum and Patrick Maxwell
Time: 16:15 - 16:45

Abstract
During Eureka a small group of people are invited who represent partner institutions of Eureka. The Eureka ambassadors are present during the course and interact with students and faculty. During this session they will introduce their own background and expertise. They will also present the network(s) they represent and explore opportunities that will allow them to expand the Eureka network at their home institutions.

Objectives
1. Get to know the ambassadors and the institutions they represent
2. Learn how their expertise, skills and network may benefit the trainees in the future

Break, 16:45 - 17:00

From Drug to the disease:
how industry chooses the indication
Presenter: Kiran Nistala
Time: 15:15 - 16:15

Abstract
Most targets for drug development have the potential to treat a range of diseases - how does industry choose the “best” disease indication? We will discuss how to integrate scientific, clinical and commercial factors in defining a lead indication for a new drug. Differences between Big Pharma and Biotech will be explored. We will challenge key myths will be challenged about Industry decision making - do commercial factors dominate? What about the needs of the patient?

Speed Dating I
Time: 17:00 - 18:30 (Starts promptly at 17:00)

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 prominently displayed and made available from Sunday.

Free Evening
Wednesday, April 11th

Coffee
Time: 8:15 - 8:30

Debriefing
Facilitators: Janet P. Hafler and Berent Prakken
Time: 8:30 - 9:00

Theory behind creativity
Facilitator: Berent Prakken
Time: 9:00 - 9:15

When to Throw a Painting to a Drowning Men: an introduction on Translational Creativity
Artists/Facilitators: Anna van Suchtelen and Brian Goeltzenleuchter
Time: 09:15 - 12:00

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 destabilise – to function outside of the socially-prescribed behaviour of artwork; we attempt to test propositions without coercing prescribed outcomes. The forms that our work takes 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. 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.

In session break

Group Lunch, 12:00 - 13:30

Stories of Success in Translational Medicine
Presenter: Maria Grazia Roncarolo
Time: 13:30 - 15:00

Abstract
Clinicians and entrepreneurs who have successfully taken ideas from the research laboratory to the clinic will discuss their stories of how they successfully navigated the science, business and administrative challenges involved in translational medicine. The session will include examples of new product development, changes in clinical practice and technology. They will also feature different models of how to work in translational medicine - new company, within a university or hybrid models

Break, 15:00 - 15:15

Unfolding Case Study 1: The Magic Bullet
Facilitators: Salvatore Albani, Hester den Ruijter, Carol Gregorio, David Hafler, Berent Prakken, Nancy Sweitzer, Maria Grazia Roncarolo, Kiran Nistala, Vicki Seyfert-Margolis, Rosalind Smyth and Sergio Quezada
Written by: Vicki Seyfert-Margolis
Time: 15:15 - 16:30

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 will be provided:


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.
Wednesday, April 11th cont.

Introduction to mentoring: Preparing for your mentoring groups
Time: 16:30 - 16:45

Facilitators: Janet P. Hafler and Berent Prakken with all mentoring faculty

Goal
To prepare both faculty and participants for participation in the mentoring groups

Objective
1. To discuss effective mentoring
2. To explore strategies to facilitate discussion in the groups

Mentoring Session I
Time: 16:45 - 18:00

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.

Free Evening

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 savvy 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 city-scape 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.
Thursday, April 12th

Coffee
Time: 8:15 - 8:30

Debriefing
Facilitator: Janet P. Hafler and Berent Prakken
Time: 8:30 - 9:00

Small Piece, Big Pie
Presenters: Berent Prakken and Sergio Quezada
Time: 09:00 - 10:15

Abstract
This interactive seminar will explore the challenge of individual achievement and collaborative research in translational medicine. Limits of the cooperation model will be highlighted and conflict resolution theory will be harnessed to propose a framework where investigators can go beyond cooperation to reach greater achievement in research.

Objectives
1. Highlight the tension between individual and team based achievement inherent in the current hyper-competitive biomedical research context.
2. Identify differences in approaching collaborative research with different organizations (academia versus industry).
3. Understand the limits of the conventional model of cooperation.
4. Explore the use of conflict resolution theory as a framework to go beyond competition and increase collaboration for meaningful research achievement.
5. Identify strategies to tackle obstacles in collaborative research.

Break, 10:15 - 10:30

Unfolding Case Study 2 - The Magic Bullet (continued)
Written by: Vicki Seyfert-Margolis
Time: 10:30 - 11:45

Group Lunch, 11:45 - 13:15

Science 3.0
Presenter: Frank Miedema
Time: 13:15 - 14:00

Abstract
Science in Transition is a Dutch initiative in which four scientists in 2013 presented a systemic analysis of the current state of science. This received a lot of attention from public, policy makers, media and scientists. It added greatly to the debate in The Netherlands and internationally about scientific quality and impact.

Central to the Science in Transition analysis is the realization that we need better rewards and incentives for scientists, and we should involve societal stakeholders in setting the research agenda. Current incentives, including abuse of impact factors, combined with hypercompetition for limited funds have severe negative effects: many publications of poor quality and limited societal impact; risk aversion and avoiding complex, multidisciplinary problems; systematic under-appreciation of education and other academic duties and very poor career perspectives for young scientists. Interventions to improve science will be discussed. http://www.scienceintransition.nl/english

Personal work time for Presentation Workshop
Time: 14:00 - 15:30

Break, 15:30 - 15:45

E-Health/Med Tech
Presenter: Vicki Seyfert-Margolis
Time: 15:45 - 16:45

Abstract
People are almost ubiquitously connected via mobile technologies. People keep track of their life. People now keep track with their mobile. The use of mobile technologies has the opportunity to usher in a new age for clinical research and management of people’s health and their diseases. While early forays into eHealth solutions mainly focused on direct to consumer health and wellness apps, increasingly more sophisticated integrated devices and software platforms are being developed and deployed in healthcare research and management. Many questions remain about how well these new tools will work in medical research and care. But one thing is for sure- eHealth is here to stay. The question now remains- can we use this to make our healthcare systems work better for our patients?

Mentoring Session II
Time: 16:45 - 18:15
Abstract and Goals

Thursday Social Program
Wine and Cheese
18:30 - 20:30
@ Barcollo (Borgia’s court yard)
Travel Tips: David Hafler
Friday, April 13th

Coffee (late start)
Time: 9:30 - 9:45

Debriefing
Facilitator: Janet P. Hafler and Berent Prakken
Time: 9:45 - 10:30

Big Data: Clinical Impact
Presenters: David Hafler and Salvatore Albani
Time: 10:30 - 12:00

Abstract
You might have been taught by your third grade teacher that the scientific approach begins with a hypothesis. Unfortunately, your teacher was incorrect as in fact, you start with an observation and from there, a hypothesis can be generated. In past years, we began in the medical sciences with observations made under a microscope or from observing patients. With the Affymetrix RNA chip followed by a series of new technologies have allowed a new approach to generating non-hypothesis limited observations that can then be used to generate more focused, unbiased hypotheses. These technologies range from elucidating the genetic architecture of a human disease to RNAseq that allows the elucidation of the total RNA expression of a cell type. Newer technologies allow whole genome methylation studies, sophisticated mass spec technologies to determine protein expression. This session will explore how “big data” can be used to generate broad testable unbiased hypotheses to allow the precise mapping of disease pathogenesis. The future challenge will be the integration of complex data sets including genetic architecture of disease risk, RNA expression in cell types that have open chromatid at sites of risk polymorphisms, K27 acetylation and K4 methylation sites of transcription start sites, followed by protein expression using techniques such as flow cytometry, mass spec and CyTOF to validate predictions based on “big data” findings.

Objectives
- Define the different types of “big data” as applied to medical science
- Give an example as to how you can use these datasets to understand a biologic problem

Group Lunch, 12:00 - 13:15

Gender and Science and Policy
Presenter: Hester den Ruijter
Time: 13:15 - 14:15

Abstract
Researchers are often unaware of the role of sex and gender differences in biomedical research. Unawareness may contribute to lack of reproducibility of results, and failure of newly developed compounds in the clinical setting. In this session we will explore how sex and gender have affected translation of biomedical research, and when stratification of results by sex and gender seems valid. In addition to scientific discussions on this topic, we will have a moving debate around sex and gender in our scientific community. Why are women underrepresented in scientific leading positions? And how do you feel about measures to promote more women to become scientific leaders?

Objectives:
1. Discuss and consider when and how sex stratification could influence your research.
2. Debate measures to promote female leadership.

Unfolding Case Study 3 - The Magic Bullet (continued)
Written by: Vicki Seyfert-Margolis
Time: 14:15 - 15:15

Break, 15:15 - 15:30
Friday, April 13th cont.

“So You Want To Start a Company?”
Presenters: Luigi Naldini
Time: 15:30 - 16:30

Abstract
There are various considerations when considering starting a company, such as the vast expanses between an idea and its delivery to patients and the market. These are often 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 maximise 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.

Break, 16:30 - 16:45

Speed Dating II
Time: 16:45 - 18:15 (starts promptly at 16:45)

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 sign-up sheet, which will be prominently displayed and made available from Sunday.

Keynote Encounter II
Luigi Naldini
Time: 18:15 - 19:45

Abstract
“Genetic engineering of hematopoiesis to treat inherited diseases and cancer”
Current results from ongoing trials of Hematopoietic Stem Cell (HSC) gene therapy performed with lentiviral vectors for the treatment of some primary immunodeficiencies (like Wiskott Aldrich syndrome, WAS) and storage diseases (like metachromatic leukodystrophy, MLD) show stable and extensive genetic engineering of hematopoiesis with polyclonal reconstitution by gene modified HSC with substantial therapeutic benefit. These clinical results also prove the feasibility to manipulate HSC ex vivo without hampering their long-term repopulation potential and open the way to design improved gene therapy strategies. To further enhance the safety and efficacy of gene transfer, we have devised novel strategies to target gene expression to selected lineages by transcriptional and post-transcriptional, micro-RNA mediated regulation and to precisely edit the genome by artificial endonucleases. These strategies are now being translated into new therapeutic strategies for treating more common diseases, such as cancer. More precise genetic engineering can be achieved by correcting disease-causing mutations in situ, thus restoring both the function of the gene and its physiological expression control. Targeted gene editing, however, is constrained in HSC by quiescence and low expression of the DNA repair machinery. We could overcome these barriers and provide evidence of correction of SCID-X1 causing mutations in the IL2RG gene. We have validated this approach in an ad hoc humanized SCID-X1 mouse model to support the scientific rationale and safety of the proposed treatment, and identify the conditioning regimen and degree of chimerism with edited cells required to correct the disease.

Free evening

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.
Saturday, April 14th

Coffee
Time: 08:15 - 08:30

Debriefing
Facilitator: Janet P. Hafler and Berent Prakken
Time: 8:30 - 9:00

Citizen Science: Publications for “real” people
Presenter: Andrew Marshall
Time: 09:00 - 10:00

Abstract
As science and technology touch every aspect of peoples’ lives, we as scientists are having an ever more profound impact on our society. And much of our work is sponsored by the public. Yet we often don’t think about our responsibility to engage our communities and societies outside of our peers. What is our social contract with the people who fund us and who we serve?

Break, 10:00 – 10:15

Presentation Workshop
Time: 10:15 - 12:30

Abstract
Building on the skills developed in Presentation Workshop I and the curriculum on the nature of translational medicine, the presenter will may focus on an issue related to the translational medicine pathway that the presenter seeks to bring to an institutional leader in order to generate a change that will enhance translational medicine.

Objectives
1. Develop the best methods to deliver a persuasive method to an institutional leader to generate collaboration towards change.
2. Identify strengths and areas for improvement in your presentation approach.
3. Identify factors and strategies that will allow you to present more effectively to an institutional leader.

Group Lunch, 12:30 – 13:45

Lessons learned
Program Designers: Anita Small and Salmaan Sana
Facilitator: Anita Small and Kiran Nistala
Time: 13:45 – 14:30

Objectives:
Reflect individually and as a group on EUREKA impact and priorities moving forward

Saturday Social Program
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 Ristorante Don Camillo (Via delle Maestranze, 96). It is located at the historical city center of Siracusa and set in the beautiful Catalan vaults.
Raising Your Communication Game
The Eureka Presentation Workshop

Communication is not something you add on to science; it is the essence of science.
- Alan Alda

Bad presentations are a contagion, spread by fear and lack of preparation. In this session, we discuss unusual and effective techniques for engaging and clear scientific communication, using techniques gleaned from the TED talks series, from the Alan Alda Center for Communicating Science at Stonybrook University, and the experience of our mentors and instructors. Goals of this interactive and experiential session are to raise each presenter’s speaking game, with improved audience awareness and focus, including a focus on tailoring communication style to the audience and predictable, high audience engagement.

In addition to a brief introductory session focused on general concepts of excellent scientific communication, this session will involve TED-talk type presentations by each participant in a small group setting. Each presentation will be recorded. After the presentation, the speaker will then review her/his own tape in private. During this time, the group will prepare constructive feedback for the presenter. Afterward, the group gets back together to hear the presenter’s own reflections and provide feedback intended to further raise that presenter’s game.

For those interested, tips on giving feedback are provided in the material for this session.

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.

Eureka Translational Creativity

In 2011, the time was ripe for the Eureka Institute for Translational Medicine to add art into its program: Eureka Translational Creativity was born. Translational Creativity was developed to complement Eureka’s education and community building initiatives.

Anna van Suchtelen and Brian Goeltzenleuchter are internationally respected artists who have a long history of collaboration. Their Eureka workshop When to Throw a Painting to a Drowning Man highlights the false dilemma of considering art and science as binary opposites. Focusing instead on the commonality of innovation, the artists produced curriculum for science innovators who strive to come to terms with the uncertainty that comes with working collaboratively and across disciplinary borders.

The core theme of the workshop is that creativity is not a talent that one either has or does not have: rather, it is a tool that can be activated and deactivated. Through participating in hands-on and often laughter-inducing group activities, students learn when, why, and how creativity can be deployed in their professional lives.

Translational Creativity CV

2011
Artists-in-Residence: Brian Goeltzenleuchter and Anna van Suchtelen

2012
Film release: When to Throw a Painting to a Drowning Man

2013
Artist-in-Residence: Kate Breakey; Artwork: The Syracuse Still Life

2014-2017
Workshop: Brian Goeltzenleuchter and Anna van Suchtelen, When to Throw a Painting to a Drowning Man; Artwork: Paintings for Drowning Men Artists’ Multiple (2014) and Hardbound Folio (2015)

On the film

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. (http://vimeo.com/47049893)
ADMINISTRATIVE FACULTY BIOGRAPHY

Julia Ong, BCOM

Julia has over 28 years of vast experience as an administrator and of which, 16 years were in healthcare. Julia joined the KK Women’s and Children’s Hospital in the year 2006 and has numerous opportunity helping to set initiatives for the hospital; the Women Mental Wellness Service in 2006-2011, SingHealth Duke-NUS Paediatrics Academic Clinical Programme in 2012-2016 and the initial set up of Professor Albani’s SingHealth Translational Immunology and Inflammation Centre in 2013.

Concurrent with her other responsibilities, Julia has coordinated the operation of the Eureka Institute since 2013. Since February 2016, she has been committed full time to assist with the execution of the Eureka Institute. This is the fifth year she is coordinating the International Certificate Program in Ortigia, Italy.

GUEST PHOTOGRAPHER BIOGRAPHY

Thirza Luijten, BA

‘My name is Thirza Luijten. After getting my photography degree at The Royal Dutch Academy of Art in The Hague I started working as a fashion photographer. Did a lot of travelling, then decided it would be nice for a change not to work solely with models, so switched to reportage and portraits.

I also did still/behind the scenes photography on film/music video sets. Since 2016 I have been involved with Eureka and I am very much looking forward to continuing that in Siracusa!’
EUREKA Institute
Faculty disclosures
Faculty biographies

EUREKA INSTITUTE
for translational medicine
Disclosures

Carol Gregorio, PhD
Discloses an affiliation with NIH for grant/research support.

David Hafler, MD
Discloses an affiliation with Biohaven Pharma (dba PharmaHaven), EMD Serono, Genentech (a member of the Roche Group), MedImmune (a member of AstraZeneca), Merck Sharp & Dohme, Mylan Pharmaceuticals, NeuroPhage Pharma (became Proclara Biosciences) Novartis Pharmaceutical and Sanofi Genzyme as a consultant/Scientific Advisory Board.

Luigi Naldini, MD, PhD
Discloses an affiliation with Editas Medicine for grant/research support and as a major stock shareholder of Genenta Science.

Kiran Nistala, MD, PhD
Discloses an affiliation with GSK as a major stock shareholder and other financial or material support.

Berent Prakken, MD, PhD
Discloses an affiliation with Dutch Arthritis Foundation for grant/research support.

Sergio Quezada, PhD
Discloses an affiliation with Biohaven Pharma (dba PharmaHaven), EMD Serono, Genentech (a member of the Roche Group), MedImmune (a member of AstraZeneca), Merck Sharp & Dohme, Mylan Pharmaceuticals, NeuroPhage Pharma (became Proclara Biosciences) Novartis Pharmaceutical and Sanofi Genzyme as a consultant/Scientific Advisory Board.

Salmaan Sana
Discloses an affiliation as a consultant to Better Future.

Nancy Sweiter, MD, PhD
Discloses an affiliation with Novartis, Merck, AHA and NIH for grant/research support.

Disclosure not available at time of printing:
Andrew Marshall, PhD
Salvatore Albani, MD, PhD, is an internationally renowned rheumatologist and immunologist. He is currently Professor of Medicine at Duke-NUS Medical School in Singapore, and the Director of the Translational Immunology Centre at SingHealth-DukeNUS Medical Centre. Before joining DukeNUS, Dr. Albani served as director of the Translational Medicine Unit at the Clinical Investigation Institute at the University of California, San Diego, where he also was professor of Medicine and Pediatrics. His fundamental research interest is in understanding human immunity and contributing the knowledge to therapeutic and diagnostic advancements. He has 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. He has 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.

These include molecular immunology, lead identification and validation, intellectual property, CMC (Chemistry, Manufacturing and Controls), IND (Investigational New Drug filings), trial design, data management and analysis, interfacing with Venture Capital and Pharma, leading complex groups in a multi-center setting, etc. The technology platform has applications in diseases that could benefit from a restoration of immune tolerance. This translational research itinerary has been the original backbone of my career, as witnessed by a rich publication trail (among others Nature Medicine, Lancet, JCI, PNAS, Nature Rheumatology, A&R, ARD, etc, H factor 34) and by approximately 100 patents.

Development of high throughput technology platforms is also part of his scientific career. These platforms aim to provide tools for knowledge-based diagnostic and therapeutic decisions.

In his role as an educator, it has been his privilege to mentor many talented individuals, and to provide the right challenges and learning opportunities to help them grow and advance. He seeks 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.

"My professional mission is to build bridges between unmet medical needs and Translational Sciences."
Brian Goeltzenleuchter, MFA

"Brian Goeltzenleuchter (b. 1976) is an artist based in San Diego, USA..."

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)
Dr. Gregorio is the Vice-Dean for Innovation and Development at the University of Arizona. She also built and currently directs the Sarver 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. She is also the head of a medical school academic department whose primary missions are to decipher the primary cause of human disease and to train the next generation of Translational Scientists. 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 a frequent grant reviewer at the National Institutes of Health. 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 William S. and Lois Stiles Edgerly Professor and Chairman Department of Neurology and Professor of Immunobiology, Yale School of Medicine, and is the Neurologist-in-Chief of the Yale-New Haven Hospital. He graduated magna cum laude in 1974 from Emory University with combined BS and MSc. 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 was trained in immunology at the Rockefeller University and then at Harvard where he joined the faculty in 1984 and later became the Breakstone Professorship of Neurology at Harvard and was a founding Associated Member of the Board Institute at MIT. In 2009 he move to Yale as the Chair of the Department of Neurology. Dr. Hafler is a clinical scientist with a research interest in the mechanism of multiple sclerosis with over 370 publications in the field of MS, autoimmunity and immunology. He is a co-founder of the International MS Genetic Consortium a group that identified the genes causing MS. Dr Hafler has been elected to membership in the American Society of Clinical Investigation, the Alpha Omega Society, and was a Weaver Scholar of the NMSS. He is 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 Investigation and the Journal of Experimental Medicine, and is co-founder of the Federation of Clinical Immunology Societies and leads the NIH Autoimmunity Prevention Center Grant at Yale. Hafler was a Jacob Javits Merit Award Recipient from the NIH and has won many awards including 2010 Dystel Prize for MS research from the American Academy of Neurology.
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.
Roos de Jonge, PhD

"...works as Advisor Patient Participation in education at the UMC Utrecht..."

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

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

"My research focusses on sex differences in cardiovascular diseases"

I am a translational scientist at the Laboratory of Experimental Cardiology in the University Medical Center Utrecht in the Netherlands. My research focusses on sex differences in cardiovascular diseases. I have been trained in fundamental research as well as in clinical epidemiology.

Currently, my research has a focus on biomarker discovery—a clinical test—to improve the diagnosis of cardiovascular disease in women. Next to my scientific research, I am a member of the Young Academy in the Netherlands where I contribute to the viewpoints and discussion on scientific policy in the Netherlands.
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 43.1.

As well as frequently speaking about biotechnology research and translation at conferences, he also organizes meetings and symposia. Previously, he was Editor of Current Opinion in Biotechnology. He has written hundreds of articles and editorials in the trade and popular media, including The Economist and Popular Science. He has pioneered networking events termed SciCafés in Boston, San Francisco, New York, San Diego, Houston, London and Singapore, 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 he was given the Helen White Prize, likely as a result of a clerical error.
Patrick Maxwell, MD, FMedSci

“He is the 27th Regius Professor of Physic in Cambridge – a post created by King Henry VIII in 1540 and still appointed by the Queen”

Professor Patrick Maxwell is currently Regius Professor of Physic at the University of Cambridge.

He graduated from Corpus Christi College, Oxford, in 1983 with First Class Honours in Physiological Sciences. Subsequently, he did his clinical training at St Thomas’ Hospital where he won the Mead Medal in Medicine and the Cheselden Medal in Surgery. The principal thrust of his research is in transcriptional control of genes by oxygen. He has worked on this for more than twenty years, initially in Oxford and then as Professor of Nephrology at Imperial College before moving to UCL in 2008 as Professor of Medicine and then Dean of Medical Sciences. His research programme has received substantial national and international recognition and has considerable potential for translation into new therapies for patients.

In 2003 with three other scientists, he set up ReOx, an Oxford University spin-out company which ultimately aims to develop medicines from these discoveries.

Professor Maxwell is a Fellow of the Royal College of Physicians, Fellow of the Academy of Medical Sciences and a Fellow of Trinity College Cambridge.

The Regius Professor of Physic is Head of the School of Clinical Medicine at the University of Cambridge and Executive Director of Cambridge University Health Partners, the Academic Health Sciences Centre for Cambridge.
Frank Miedema (1954) studied biochemistry at the University of Groningen, specializing in immunology, with a minor in Philosophy of Science. He obtained a PhD from the University of Amsterdam at the Central Laboratory of the Blood Transfusion Service (CLB), now Sanquin. There, from 1983 he was project leader immunovirology of HIV/AIDS as part of the Amsterdam Cohort Studies. In 1996 he was appointed full professor at AMC/University of Amsterdam and in became Director of Sanquin Research in 1998. In 2004 he became head of the Immunology department at the University Medical Center Utrecht.

From 2009 he is dean and vice chairman of the Executive Board at the University Medical Center Utrecht.

He is one of the initiators of www.scienceintransition.nl/english. Science in Transition believes that the scientific incentive and reward system is in need of fundamental reform. Next to Science for Science (articles in journals), the added value for society needs to be more appreciation and societal stakeholders should be involved more integrally in the production of knowledge.
Daria Mochly-Rosen, PhD

"Daria is the founder, president and co-director of SPARK (since 2006) which provides education in drug discovery and development"

Daria Mochly-Rosen, Professor of Chemical and Systems Biology, is the George D. Smith Professor for Translational Medicine and the co-director of SPARK at Stanford. Daria leads a multi-disciplinary research lab that includes chemists, biochemists, biologists and physician scientists and has used her basic research discoveries to develop a number of drug leads for human diseases with a particular interest in mitochondrial biology and pathology. She was the chair of her department (2001-2004) and Senior Associate Dean for Research (2013-2016), has published over 250 papers, ~30 patents and patent applications and founded 3 companies: KAI Pharmaceuticals (2003-2011), ALDEA/Aviv (now 2013; now licensed to Foresee) and Mitoconix Biosciences (2016-).

Daria is the founder, president and co-director of SPARK (since 2006) which provides education in drug discovery and development and has helped over 100 inventors (60% of the participants) of biopharmaceuticals and diagnostics bring their invention to clinical studies and/or to licensing. She is the president founder of SPARK Global established (or under development) in many academic institutions around the world, increasing the likelihood that new treatments will be developed from academic research efforts across the globe.

Dr. Mochly-Rosen holds a Ph.D. in Chemical Immunology from the Weizmann Institute of Science in Israel, and completed her postdoctoral training at University of California, Berkeley.
Luigi Naldini, MD, PhD

"Pioneered the development and applications of lentiviral vectors for gene transfer, which have become one of the most widely used tool in biomedical research"

Luigi Naldini is Professor of Cell and Tissue Biology and of Gene and Cell Therapy at the San Raffaele University School of Medicine and Scientific Director of the San Raffaele Telethon Institute for Gene Therapy, Milan, Italy. He has pioneered the development and applications of lentiviral vectors for gene transfer, which have become one of the most widely used tool in biomedical research and, upon recently entering clinical testing, are providing a long sought hope of cure for several currently untreatable and otherwise deadly human diseases. Since then he has continued to investigate new strategies to overcome the major hurdles to safe and effective gene transfer, translate then into new therapeutic strategies for genetic disease and cancer, and allowed new insights into hematopoietic stem cell function, induction of immunological tolerance and tumor angiogenesis. His work also contributed to advance the use of engineered nucleases for targeted genome editing in cell and gene therapy. Luigi Naldini is inventor of 58 granted international patents; he has published 256 papers in international peer-reviewed scientific journals: overall, as of December 2017, his papers have been cited > 33,000 times since 1996 (Scopus h-index: 87). Luigi Naldini is member of the European Molecular Biology Organization (EMBO), has been President of the European Society of Gene and Cell Therapy (ESGCT), has been appointed member as expert in the human gene editing field in the international scientific committee on “Human Gene Editing Study” from the National Academies of Sciences, Engineering and Medicine (NAS), USA, and from the National Academy of Medicine (NAM), USA. He was awarded an European Research Council Advanced Investigator Grant (ERC) in 2009, the Outstanding Achievement Award from the American Society of Gene and Cell Therapy (ASGCT) in 2014 and from ESGCT in 2015, an Honorary doctorate from the Vrije University, Brussel, in 2015, the Jimenez Diaz Prize in 2016 and the Beutler Prize from the American Society of Hematology (ASH) in 2017.
FACULTY BIOGRAPHIES

Kiran Nistala, MD, PhD

"Four years of murine research was enough to convince him of the importance of researching medicines in man!"

Kiran is an experimental medicine physician at GSK specialising in Drug Discovery Project Leadership and Early Phase Clinical Trial Design in the Complement, Chemokine and Cytokine Drug Discovery Unit. His additional roles include chair of the GSK Immunotoxicology panel and member of Experimental Medicine Initiative steering committee, a collaboration between GSK, AstraZeneca and University of Cambridge. His clinical activities are based at Great Ormond Street Hospital as an Honorary Consultant in Paediatric Rheumatology. Prior to joining GSK, Kiran trained as an academic paediatric rheumatologist. During his PhD at Institute of Child Health, UCL, Kiran was the first to show that IL-17 secreting T cells played a pathogenic role in childhood arthritis (Juvenile Idiopathic Arthritis (JIA)). This was followed by a Wellcome Intermediate Clinical Fellowship working in the group of Prof Mauri, investigating the molecular control of B cell differentiation using a mouse model of autoimmunity. Four years of murine research was enough to convince him of the importance of researching medicines in man!
Berent Prakken (MD, PhD) is vice-dean and director of the biomedical education centre at the University Medical Center Utrecht (UMCU), the Netherlands. He is also professor of paediatric immunology at the UMCU and honorary professor at the University of Ghent, Belgium. Berent Prakken has built a translational research lab that focused on regulation of inflammation and biomarker development in human inflammatory diseases. He received numerous national and international awards and grants for his work. The work of his group is published in all major international journals, including Nature Medicine, PNAS, Immunity, the Lancet, JCI and in various Nature journals. Over the years he successfully mentored more than 40 PhD students. Prakken serves in various national and international research advisory boards and was member of the Dutch National Health Council (‘Gezondheidsraad’). He was vice-chair of Medical Ethical Review Board (IRB) of the UMCU. Berent Prakken is president of the Pediatric Rheumatology European Society (PRES) and member of the EULAR executive committee. He is member of the steering committee of UCAN (international federation facilitating biological research in arthritis) and has set up the first international platform for biological studies in arthritis (UCAN-U, www.ucan-u.org). Berent Prakken’s personal commitment is to training & education and to improve the impact of science. Unconventional thinking, collaboration and crossing boundaries inspire him, just as his close friendship with Salvo Albani, Norm Rosenblum and the other board members of Eureka. As co-founder and board member he enjoys the journey on which Eureka is taking them.
FACULTY BIOGRAPHIES

Sergio Quezada, PhD

"Dr. Sergio Quezada is a Professorial Research Fellow and Group Leader at UCL Cancer Institute in London..."

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, MD, PhD

"Her efforts focus on the translation of scientific discoveries in genetic diseases and regenerative medicine..."

Maria Grazia Roncarolo, MD, is 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, Director of the Center for Definitive and Curative Medicine (CDCM), Co-Director of the Institute for Stem Cell Biology and Regenerative Medicine, and Co-Director of the Bass Center for Childhood Cancer and Blood Diseases.

Her efforts focus on the translation of scientific discoveries in genetic diseases and regenerative medicine into novel patient therapies, including treatments based on stem cells and gene therapy. Dr. Roncarolo, a pediatric immunologist by training, 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 “bubble boy disease”.

Dr. Roncarolo was a key member of the first team to carry out stem cell transplants given before birth to treat these genetic diseases. Dr. Roncarolo then worked at the DNAX Research Institute for Molecular and Cellular Biology in Palo Alto, where she contributed to the discovery of novel cytokines, studying their role in the induction of tolerance and promotion of stem cell growth and differentiation. As director of the Telethon Institute for Cell and Gene Therapy at the San Raffaele Scientific Institute in Milan, Dr. Roncarolo successfully led the first stem cell-based gene therapy trail for SCID patients lacking adenosine deaminase (ADA), a severe life-threatening disorder. The trial, combining gene corrected blood stem cells with low-dose chemotherapy, is now considered the gold standard for gene therapy in inherited immune diseases. She was also the principal investigator in a successful gene therapy trial for Wiskott Aldrich Syndrome.

During her research on inherited immune diseases, Dr. Roncarolo also discovered a new class of T cells, called T regulatory type 1 cells. These cells play a key role in maintaining immune-system homeostasis by preventing autoimmune and inflammatory diseases and helping the immune system tolerate transplanted cells and organs. She recently discovered specific biomarkers for these T regulatory type 1 cells, which will be used to purify the cells for clinical use and for tracking in patients. She was the first to complete a successful clinical trial using T regulatory type 1 cells to prevent severe graft-versus-host disease in leukemia patients undergoing allogeneic hematopoietic stem cell transplantation.

Dr. Roncarolo has brought many basic-science discoveries from the bench to patients in the field. She holds eight patents, with six more pending, for methods used in novel cell and gene therapies. She has published more than 280 scientific papers along with 22 book chapters, and her publications have been cited over 20,000 times. She is a Member of the Academia Europaea of Sciences and of the Austrian Academy of Sciences.
Dr. Norman Rosenblum is Professor of Pediatrics, Physiology, and Laboratory Medicine and Pathobiology at the University of Toronto, and a Paediatric Nephrologist and Senior Scientist in the Research Institute, the Hospital for Sick Children. He is the recipient of a Tier I Canada Research Chair in Developmental Nephrology. In 2018, Dr. Rosenblum assumed the role of Scientific Director of the Canadian Institutes of Health Research (CIHR) Institute of Nutrition, Metabolism and Diabetes (INMD). CIHR is Canada’s federal health research granting agency. INMD is one of 13 Institutes dedicated to development of Canada’s health research strategy in specific subject areas.

Dr. Rosenblum is a MD graduate of Dalhousie University. He completed a Pediatric residency and a fellowship in Pediatric Nephrology at the Children’s Hospital, Boston followed by a postdoctoral fellowship in the laboratory of Bjorn Olsen in the Department of Anatomy and Cell Biology, Harvard Medical School. Dr. Rosenblum was recruited in 1993 as a clinician scientist to the Hospital for Sick Children and University of Toronto. Since then, the focus of his research has been to elucidate molecular mechanisms that control normal and malformed kidney development in genetic mouse models with a focus on signaling by bone morphogenetic, WNT and Hedgehog proteins.

His lab has generated several models of human kidney-urinary tract malformation. He has published over 110 peer-reviewed original manuscripts and book chapters.

Dr. Rosenblum has been deeply engaged in developing and managing career development programs for clinician scientists. He founded and led the Canadian Child Health Clinician Scientist Program from 2001-2012 and served as Associate Dean, Physician Scientist Training in the Faculty of Medicine, University of Toronto, from 2008-2017. Dr. Rosenblum is immediate Past-President of the Canadian Society for Clinical Investigation and a current member of the Council of the American Pediatric Society. He is a founding member of the EUREKA Institute for Translational Medicine and served on the Board of Directors and the Faculty of the Certificate Course (2008-2017).

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.
Salmaan speciality is in healthcare leadership, change and compassion. He is a creative program designer, facilitator and coach. Starting as active medical student at the VUmc medical centre in Amsterdam, he initiated many projects on leadership and development, and has been very involved in (Medical) Education. In 2008 he started the international “Leadership Summer School” (http://leadershipsummerschool.org), in 2011 he started a foundation together with other healthcare professionals on Compassionate Healthcare (http://www.compassionforcare.com/en/). This especially lifted off after taking the stage at TEDxMaastricht (https://www.youtube.com/watch?v=UxaT-Yx-Qds4). He was co-initiated and help run leadership programmes for healthcare professionals (http://humansofhealth.com). Salmaan was appointed to be the first ‘chief compassionate officer’ in an academic hospital giving him the chance to research ways to cultivate compassion on an individual, departmental and institutional level.

Being an entrepreneur, Salmaan also started a company in 2011 with one of his friends focusing on bridging the offline and online worlds, which later on became “Nameshapers” (www.nameshapers.com).

After having worked for his foundation, his company, and being involved with a series of different events & initiatives, he decided to work on having more of a social impact, and learning how to create meaningful learning experiences. For the past 3 years he has been working for Better Future (www.better-future.com) continuing his passion for guiding organisations, consulting and enabling change agents.

Currently running programs in hospitals on what medical leadership is, what the most important topics are and what steps to take so that each person takes responsibility and ownership for the change that is needed.

With the current burn out rate being so high within healthcare professionals, Salmaan has been focusing on getting the very same professionals to have more influence on their work setting and turn down the dropout rate. He helps them develop their personal leadership and in all aspects of the word, become ‘healthy’ healthcare professionals. For medical residents he runs a 10 month program called “Gamechangers in Health” where the participants learn how to become a change agents and tangibly shift things in their environment.

At Better Future, Salmaan works very broadly with Healthcare institutes and faculties. He guides teams and organisations in becoming strategically purpose driven and getting the best out of everyone utilising intrinsic incentives and motivation. He enjoys enabling human potential and catalysing creativity. He works on ways of connecting social impact, personal leadership and team building. A part of his work also includes working with the largest health NGO in Africa, Amref Health Africa (www.amref.org).

On any other day, you can find him living in the South of Amsterdam, using his bike to get around the city, building some consistency in practising cross-fit, and dabbling in different kinds of writing.

For more information, go to his Linkedin profile www.linkedin.com/in/salmaansana and find him widely on other social media platforms.

“Don’t ask what the world needs. Ask what makes you come alive, and go do it. Because what the world needs is people who have come alive.” - Howard Thurman
FACULTY BIOGRAPHIES

Vicki Seyfert-Margolis, PhD

"...founded My Own Med in January 2013, based on over two years of work on a database, web and mobile application platform technology for family based co-management of health."

Vicki Seyfert-Margolis, PhD founded My Own Med in January 2013, based on over two years of work on a database, web and mobile application platform technology for family based co-management of health. Previously, Dr. Seyfert-Margolis was the Senior Advisor for Science Innovation and Policy in the Office of the Commissioner of the US Food and Drug Administration. While at the FDA, she oversaw the development and execution of an agency wide strategic plan for regulatory science. Prior to the FDA, she served as Chief Scientific Officer at the Immune Tolerance Network (ITN), a non-profit consortium of researchers seeking new treatments for diseases of the immune system. At ITN, Dr. Seyfert-Margolis oversaw the development of over 20 leading edge assay development and centralized laboratory facilities, bringing them to GLP and CLIA compliance. She designed and implemented biomarker discovery studies for over 25 Phase II clinical trials across a broad array of immunologically mediated diseases including autoimmune disorders, allergy, and solid organ transplantation. Prior to this, she served as Director of the Office of Innovative Scientific Research Technologies at the National Institute of Allergy and Infectious Diseases at NIH, where she worked to integrate emerging technologies into existing immunology and infectious disease programs. Dr. Seyfert-Margolis completed her PhD in immunology at the University of Pennsylvania’s School of Medicine, and her post-doctoral fellowship work at Harvard University and the National Cancer Institute.
Dr. Anita Small is a sociolinguist, educator and researcher. She is inspired to bridge seemingly different worlds through communication, language and culture. Dr. Small is founder and owner of small LANGUAGE CONNECTIONS, consulting to non-profit organizations, theatres, museums, broadcast companies and educational institutions. Her work engages diverse groups to co-create collaborative communicative contexts for program innovation and organizational 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, York University for 12 years and in the Linguistics Department, University of Toronto. She is cross-appointed to Hogeschool Utrecht University, Institute for Sign Language & Deaf Studies, Netherlands researching Deaf performing arts. She has authored publications on language planning, bilingual pedagogy, sign language literacy and performance arts, Deaf identity and cross-cultural interaction.

Anita Small has obtained over nine million dollars in language and culture project grants and mentors artists and organizations on effective grant writing. She spearheaded and served as content manager and co-creator of numerous award-winning sign language productions (children’s books, videos, DVD’s and websites). She is recipient of a United Nations International World Summit/ UNESCO Award (2013) as co-creator of the Deafplanet educational television series and website www.deafplanet.com and of the International W3 Award (2012) for the first Animated American Sign Language (ASL) Dictionary for Children, www.aslalphabet.com. Dr. Small established the Canadian Literary and Deaf Arts Awards of Excellence through the Canadian Cultural Society of the Deaf and the International Deaf Documentary Awards through Deaf History International.

Dr. Small was project manager and author of the Deaf Artists and Theatres Toolkit (DATT), 2016, an online guide to engage Deaf performing artists and audiences across Canada. She serves on the Ontario Museums Inclusive Leadership Advisory Board co-creating a practitioner’s guide to inclusive museums.

Dr. Small has her Doctorate of Education in Sociolinguistics (1986) and Cultural Mediation and Dispute Resolution Training (1992). She has taught, consulted and mediated in the U.S., Canada, Japan, Italy and the Netherlands and has provided cross cultural interaction training and mediation with Deaf and hearing personnel for 30 years. Dr. Small is recipient of the singular national award from the Canadian Deaf community (2006) given to a hearing individual.

www.anitasmall.com
FACULTY BIOGRAPHIES

Rosalind L Smyth, CBE, MA MBBs, MD, FRCPCH, FMedSci

"She was awarded a CBE in the Queen’s New Year’s Honours list in 2015 for services to drug regulation for children."

Rosalind Smyth is Director of The Great Ormond Street Institute of Child Health at University College London, Honorary Consultant Respiratory Paediatrician and non-executive director of Great Ormond Street Hospital NHS Foundation Trust. She graduated in medicine from Clare College, Cambridge and Westminster Medical School and trained in paediatrics in London, Cambridge and Liverpool. Until September 2012, she was Professor of Paediatric Medicine in at the University of Liverpool and, from 2005-2012, was Director of the NIHR Medicines for Children Research Network, which supports all clinical research with children in England. She is a Fellow and previous Council member of the Academy of Medical Sciences (UK). She has been a panel member of numerous national and international research funding and assessment bodies and the UK’s 2014 Research Evaluation Framework. She was a member of the Medicine and Healthcare Products Regulatory Agency’s Commission on Human Medicines (2009-2013) and chaired its Paediatric Medicines Expert Advisory Group (2002-13). She was awarded a CBE in the Queen’s New Year’s Honours list in 2015 for services to drug regulation for children. She chairs the UK Medical Research Council’s Clinical Careers and Training Committee, is a Governor of the Health Foundation and a Trustee of the UK’s Cystic Fibrosis Trust.
Anna van Suchtelen (New York 1961) studied Literature (MA) in Groningen, the Netherlands and Visual Arts at University of California San Diego, USA. She is an artist and a writer. Text and narrative play a crucial role in her visual work, which includes installations, 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.


http://www.annavansuchtelen-eng.kunstinzicht.nl/
Nancy K. Sweitzer, MD, PhD

“...She is a board-certified advanced heart failure and transplant cardiologist and physician-scientist...”

Nancy K. Sweitzer, MD, PhD, is director of the University of Arizona Sarver Heart Center, professor of medicine and chief of the Division of Cardiovascular Medicine in the University of Arizona College of Medicine - Tucson. She is a board-certified advanced heart failure and transplant cardiologist and physician-scientist, specializing in heart failure, mechanical circulatory support and heart transplant.

Nationally recognized for her leadership and experience in physiologic research and clinical trials, Dr. Sweitzer’s research program focuses on better understanding how to improve symptoms and organ function in heart failure patients. She has done extensive work on the physiology of heart failure with preserved ejection fraction. She has led and collaborated on clinical trials sponsored by the National Institutes of Health as well as industry, foundation and academic sponsors. She has served on numerous NIH committees and currently serves as a member of the NHLBI Clinical Trials Study Section.

Dr. Sweitzer was named editor-in-chief of Circulation: Heart Failure in July 2017. One of the most widely respected cardiology journals published, its impact ranking is 15 out 139 cardiovascular medicine journals. She is active in leadership of the American Heart Association, the American College of Cardiology and the Heart Failure Society of America. She is on the board of the Association of Professors of Cardiology, a group of US national leaders in cardiovascular medicine, and was inducted into the Association of University Cardiologists in 2017.

A passionate educator, Dr. Sweitzer was the program director of the Cardiovascular medicine and Advanced Heart failure fellowships at the University of Wisconsin from 2004-2013. She has won teaching award at Harvard Medical School, the University of Wisconsin and the University of Arizona.
Ambassadors biographies

Charles B. Cairns, MD, FACEP, FAAEM, FAHA

"Charles Cairns is Dean of the College of Medicine and Professor of Emergency Medicine at the University of Arizona in Tucson."

Charles B. Cairns, MD, is Dean of the College of Medicine and Professor of Emergency Medicine at the University of Arizona in Tucson. Previously, he served as Chair of the Department of Emergency Medicine at the University of North Carolina and as the Director of Emergency Medicine Research at the Duke Clinical Research Institute, the world's largest academic clinical research organization. His research interests include the host response of patients and populations to acute stress (acute infections, sepsis, cardiopulmonary and trauma resuscitation). Dr. Cairns is the Director of the United States Critical Illness and Injury Trials Group and served as Principal Investigator of the National Collaborative for Bio-preparedness. Dr. Cairns has served in leadership positions in major emergency and critical care medicine societies.

He has published 200 scientific articles and reviews and has secured more than $30 million in federal research funding, including grants from the National Institutes of Health, Centers for Disease Control and Prevention, Food and Drug Administration, Department of Defense and the Department of Homeland Security. He has served as a consultant for the governments of the United Kingdom, Canada and United Arab Emirates. Dr. Cairns is an honors graduate of Dartmouth College and received his medical degree from the University of North Carolina, where he was a Holderness Medical Fellow and received the Medical Faculty Award as the outstanding graduating medical student.

Dr. Cairns has been honored with the Emergency Medicine Foundation Established Investigator Award, the American College of Emergency Physicians Outstanding Contribution in Research Award and the 2014 John Marx Leadership Award of the Society for Academic Emergency Medicine, the highest award of the field. He is a fellow of the American College of Emergency Physicians, the American Academy of Emergency Medicine and the American Heart Association.
Ambassadors biographies

Pierce Chow, MMS, MMed, FAMS, FRCSE, PhD

"Pierce Chow is an academic surgeon and Professor at the Duke-NUS Medical School, Singapore"

Pierce Chow is an academic surgeon and Professor at the Duke-NUS Medical School, Senior Consultant Surgeon at the National Cancer Centre Singapore and the Singapore General Hospital, NMRC Senior Clinician Scientist, and Research Director at the Institute of Cellular and Molecular Biology. In 1998, he co-founded the Asia-Pacific Hepatocellular Carcinoma (AHCC) Trials Group and chaired 5 multi-centre clinical trials that have involved > 30 centres in 14 countries. He was conferred the NMRC National Outstanding Clinician Scientist Award for improving clinical outcomes with his research on HCC in 2012. In 2005 Prof Chow lead the translational team that developed BrachySil® (Oncosil) in collaboration with PSI Medical and the first-in-man trial that followed.

In 2016, Prof Chow was awarded the NMRC TCR grants for the Flagship Program in Liver Cancer. Building on positive results of earlier genetic and immunology studies in surgically-resected HCC, Prof Chow now leads a multi-national study on how genomic heterogeneity and the immune micro-environment in HCC impact clinical outcomes. The Program has initiated new multi-national clinical studies across the Asia Pacific to advance treatment strategies for HCC. In 2017 Prof Chow was awarded the BMRC IAF-PP Grant to develop a patient-specific diagnostic and predictive platform for Precision Medicine in HCC.
Tuula Kalliomäki, MBA, PhD

"Tuula completed her PhD at the University of Toronto, in Medical Biophysics, with a focus on tumour microenvironment and its effects on cancer progression."

Tuula completed her PhD at the University of Toronto, in Medical Biophysics, with a focus on tumour microenvironment and its effects on cancer progression. After becoming well-acquainted with the laboratory cousins of Mus musculus Tuula moved on to Medical Imaging, with the Joint Department of Medical Imaging, with a cross-appointment to University of Toronto. In this role Tuula managed medical imaging research operations for clinical and pre-clinical trials, covering the full spectrum of funding applications, multi-party contract negotiations with industry and academia partners, ethics submissions, subject enrollment, data collection and management and publication.

Concurrently with the operations work, over the past three years, Tuula completed her MBA at the Rotman School of Management. During this program, along with core business administration, she focused on strategy implementation, applied innovation and integrative thinking.

Since the end of 2017, Tuula has expanded her work in Medical Imaging-specific research to business planning and operations with the Toronto General Research Institute (TGHRI), at the University Health Network. The focus of TGHRI is on Person-Centered Biomedical Research and Health Systems and Services Research.
Ambassadors biographies

Norma Sue Kenyon, PhD

"Norma Sue Kenyon is Vice Provost for Innovation at the University of Miami and Chief Innovation Officer of the Miller School of Medicine"

Norma Sue Kenyon, Ph.D. is Vice Provost for Innovation at the University of Miami and Chief Innovation Officer of the Miller School of Medicine. Under her leadership, the U Innovation team, including the Office of Technology Transfer and the Wallace H. Coulter Center for Translational Research, has successfully increased the number of licensing agreements and startups from across the university’s 11 schools and colleges. Kenyon also leads a master planning process to develop an innovation district around UM’s life science park (now known as Converge Miami), and as part of the university’s roadmap initiative, is heading up planning for innovation across the university.

A Professor of Surgery, Microbiology & Immunology and Biomedical Engineering at the Diabetes Research Institute, Dr. Kenyon and her research team have focused on ways to transplant insulin producing islet cells, in both clinically relevant transplant models and in clinical studies, without the need for life-long anti-rejection drugs. Key accomplishments in both clinically relevant transplant models and clinical studies include development and sharing of methods for islet and islet/bone marrow transplantation, demonstration of insulin independence and long-term islet survival and incorporation of stem cells to enhance islet engraftment and survival. Kenyon has received research funding from the National Institute of Allergy and Infectious Disease, the National Institute of Diabetes, Digestive and Kidney Diseases, the Juvenile Diabetes Research Foundation International, the Diabetes Research Institute Foundation and several industry collaborators. She has served as Chair for Immunology in the NIH funded Type 1 Diabetes TrialNet and the Clinical Islet Transplant consortiums. Kenyon has also served as a member of the National Advisory Allergy and Infectious Disease Council and recently finished service as a member of the NIH Council of Councils. Kenyon was a scientific advisor to the Food and Drug Administration, spending half her time at the FDA for a year and has participated in several panels involving islet transplantation.

Kenyon earned her undergraduate degree from Duke University and her Ph.D. from Virginia Commonwealth University, followed by post-doctoral positions at UCLA and the University of Miami. Subsequent to post-doctoral training, Kenyon was a Senior Scientist and Lab Head at Coulter Corporation, holding positions in both research and product development.
Ambassadors biographies

Moni Kim, MPH, BASc

"For more than ten years she played a key role in leading development organizations to mobilize international partnerships with civil society, academic institutions, government and private stakeholders."

Moni Kim provides leadership and management oversight of the professional graduate program at the Translational Research Program (TRP) at the Faculty of Medicine, University of Toronto. As a core member of the TRP team, she is responsible for strategic partnerships and communications.

Before joining the Translational Research Program, Moni served in various capacities that advanced health and human rights movements globally. For more than ten years she played a key role in leading development organizations to mobilize international partnerships with civil society, academic institutions, government and private stakeholders. These collaborations involved scaling up local and global responses to HIV prevention and treatment efforts in sixteen of the hardest-hit countries of sub-Saharan Africa and expanding innovative youth entrepreneurship among the world’s most marginalized communities.

She also contributed to a range of critical public health work with indigenous peoples, incarcerated populations in Canada, North Korean refugees, and elderly seniors living in extreme poverty in Uganda. Moni’s passion is to inspire action to achieve the vision of a world where every person has the opportunity to live a healthy, productive life.

Moni started her professional career as a researcher for one of the most ambitious research projects on the long-term impacts of early childhood development programming ever initiated in Canada at Queen’s University. She holds a Master of Public Health from the Dalla Lana School of Public Health, University of Toronto, with a Health Promotion specialization. She also completed a certificate in International Development from the Coady International Institute.
Ambassadors biographies

Susanne van Weelden, PhD

"Director Internal Affairs Utrecht Life Sciences, Utrecht University/University Medical Center Utrecht “

I’m trained as a biochemist in Nijmegen. After my PhD at the Faculty of Veterinary Medicine at Utrecht University, I became the project manager of several large EU research projects and was closely involved in acquisition of funding. During my time at the Dutch Research Council, I continued to develop as a policy advisor in the field of chemical sciences, and as a program manager of a public-private program on sustainable hydrogen.

Since 2007, I’ve specialized in strategy development, research policy and assessment, talent management and innovation and funding policies on an organizational level at the Faculty of Sciences at Utrecht University and the University Medical Center Utrecht. I have 5 years of experience in leading and developing a team of highly educated professionals.

My extensive experience and network within the organizations that together form Utrecht Life Sciences, Utrecht University and Utrecht University Medical Center, will make it possible to make these connections. My strength lies in sensing situations and their underlying dynamics, and then translating them into something that works in practice. I really like to get things done!
Dr. Al-Ali is a Research Assistant Professor at the University of Miami and the Chief Scientific Officer at Truvitech, LLC. He is a biochemist with broad expertise in chemical, biological, and computational sciences and specific interest in drug discovery. He received his Masters in Biochemistry from the American University of Beirut (AUB) in 2003. Dr. Al-Ali helped establish the Bioinformatics and Computational Sciences Core at AUB, and managed it for two years. In 2005, he joined the University of Miami, where he received his PhD in Biochemistry and Molecular Biology in 2010. He did his postdoctoral studies at the Miami Project to Cure Paralysis, where he developed a novel platform technology (idTRAX) for drug discovery.

This work culminated in the identification of a small-molecule kinase inhibitor that strongly promotes axon regeneration, and is now in preclinical development for treating CNS injury. In 2016, Dr. Al-Ali co-founded a Miami-based startup company, Truvitech, LLC. The company is aimed at commercializing the idTRAX technology and extending its application to oncology and kidney disease. At the University of Miami, Dr. Al-Ali is a member of the three major drug discovery groups (Miami Project to Cure Paralysis, Sylvester Drug Discovery Center, and Katz Drug Discovery Center). He is currently engaged in several biotechnology R&D and therapeutic development projects that intersect academia with industry.

Dr. Baruteau is a Clinician Scientist in the Genetics and Genomic Medicine Programme, Great Ormond Street Institute of Child Health at University College London since 2016 and Honorary Consultant in Metabolic Medicine, Great Ormond Street Hospital for Children in London. He did his core medical training in Toulouse, France where he graduated as Paediatrician in 2008. He specialised in Inherited Metabolic Diseases in Paris and Toulouse, France where he worked as a Locum Consultant during four years.

Since 2012 he has joined the Metabolic Medicine Unit at Great Ormond Street Hospital for Children and is co-investigator in various first-in-man paediatric clinical trials. His research interests focus in innovative cell and gene therapies for liver inherited metabolic diseases.

After a Master of Science in Prof Sokal’s laboratory, Catholic University of Louvain, Brussels, Belgium working on liver progenitor cells for Metabolic Diseases, he was awarded a PhD funded by a Research Training Fellowship from Action Medical Research Charity for developing a gene therapy approach in a mouse model of urea cycle defect called argininosuccinic aciduria, a rare liver inherited metabolic disorder. Since 2016, Great Ormond Street Hospital Charity and Medical Research Council are supporting his efforts to develop the first-in-children early phase clinical trial of liver-directed gene therapy for another urea cycle defect, ornithine transcarbamylase deficiency. He is working as an expert for the French National Agency for Medicines and Health Products Safety since 2010.
Participants biographies

Christian Bime, MD, MSc

I am an Assistant Professor of Medicine at the University of Arizona School of Medicine, Tucson Arizona, USA. After my MD degree from the University of Yaoundé 1, Cameroon, I obtained a Master of Science in Epidemiology from Michigan State University School of Medicine, East Lansing MI, USA. Subsequently, I completed residency training in Internal Medicine at Wayne State University, Detroit MI, USA. Then served as Chief Medical Resident at the same institution for one year.

In 2009, I began a postdoctoral clinical and research fellowship training in Pulmonary and Critical Care Medicine at the Johns Hopkins School of Medicine. This was supported by a National Institutes of Health/National Heart Lung and Blood Institute (NIH/NHLBI) training grant (T32 HL07534) and an NIH/NIAID Individual National Research Service Award (NRSA). During this time, I completed clinical training in adult pulmonary and critical Care and explored the mechanisms through which nasal steroids control severe asthma associated with chronic rhinosinusitis. As part of the American Lung Association - Airways Clinical Research Centers (ACRC) Data Coordinating Center (DCC) at Johns Hopkins University, I was actively involved in the design and conduct of four large multicenter randomized control trials in asthma. In July 2013, I was recruited to the Division of Pulmonary, Allergy, Sleep, and Critical Care Medicine at the University of Arizona School of Medicine as Assistant Professor of Medicine on tenure track. I joined the laboratory of Dr. Joe G.N. (Skip) Garcia, world-renowned scientist in the field of Acute Respiratory Distress Syndrome (ARDS), genetics, and health disparities. My research goal is to pursue translational ARDS research exploring the genetic and non-genetic factors that underlie the health disparities in ARDS susceptibility and associated mortality. Under Dr. Garcia’s mentorship, I have published several peer-reviewed manuscripts focused on ARDS health disparities and genetics. I recently received a mentored research scientist award (K08) from the NIH/NHLBI. With this award, I seek to contribute to the understanding of the genetic and non-genetic factors that contribute to ARDS disparities, identify patient-specific risk factors that underlie differential response to therapy, and develop therapeutic response profiles that will guide a personalized approach to the ARDS management.

Silvia Bonanno, MD

I was born in Genoa the 7th of February 1985 from a family with Sicilian origins. My family is composed by my parents and my younger sister. I love Genoa and at the same time I’m proud about my Sicilian origins which characterize my family’s way of being: very hospitable and with apassion for the good food… aspects appreciated by all my friends of course! Since I was 8 years old, I’ve been mountainhiking and I had the opportunity to explore many glaciers of the Alps. I think that the mountain-experience left a deep print on my character; the same was done by rock music from the ‘60s and ‘70s, which I loved to play with my guitar and the drums. Latin and Greek literature, philosophy, and history are at the basis of my education; at the end of the high school there were many different fields I was interested in, eventually I chose to pursue the medical career. I approached the research in neuroscience in 2007 during my fifth year of Medicine School joining the laboratory of Neurogenetics at the University of California, San Francisco; this experience was inspiring and fostered my curiosity in understanding mechanisms underpinning neurological diseases. When I graduated in 2009, I moved to Milan at the Institute Carlo Besta, a research-based hospital, where I did my Residency in Neurology working in understanding neuromuscular disease mechanisms, both on the clinical and laboratory sides. In 2015, during the last year of residency, I started my PhD in Neuroscience at the University of Milan Bicocca. I decided to apply for this program because of its focus on translational research in medicine, the latter being the guiding path of my research interests. In June 2016 I obtained my specialty degree in Neurology. In the frame of the PhD program, from October 2016 to December 2017, I’ve been working at the laboratory and multidisciplinary clinic of the ALS Weinberg Center at Thomas Jefferson University of Philadelphia, Pennsylvania, where I learned and applied new techniques to develop patient specific in vitro models that I envisage will allow meaningful advancements in ALS comprehension and patients-oriented health care. Since January 2018, I’m working as a Fellow Neurologist at the Neuromuscular Diseases Unit at Carlo Besta Institute, and I’m attending my 3rd year of PhD. I believe that during my whole professional experience I have been trying to combine my clinical activities on patients with basic research; a couple of months ago, I was recipient of my first grant and I’m excited about the opportunities that now open up!
Participants biographies

**Eugene Chang, MD**

I have been an Associate Professor in the Department of Otolaryngology-Head & Neck Surgery and Director of the Rhinology and Endoscopic Skull Base surgery division at the University of Arizona. I am a surgeon-scientist and have continuously been funded by the National Institute of Health since residency via support through the following mechanisms: T32, KL2, K08, and RO1 funding.

Clinically, I have developed a nationwide referral specialty practice for persons with diseases of the paranasal sinuses and anterior skull base. I have been a leader in providing multi-disciplinary care for patients by the formation of the Center for Sinonasal and Skull Base Tumors: a partnership with neurosurgery to provide minimally invasive surgery of the sinuses and skull base for both benign and malignant tumors and the Center for Sinus and Allergic Diseases: a partnership with pulmonary and allergy/immunology to provide comprehensive airway care. I am also the director of the rhinology fellowship program, a 1-year subspecialty fellowship with successful placement of all three past fellows into teaching institutions. I was elected a fellow of the American College of Surgeons in 2014 and have received several teaching and research awards.

I am a surgeon-scientist and am the director of the NASAL laboratory, investigating scientific advances on the bench and translating these discoveries to improve clinical care. My research spans several areas: 1. Investigating the pathogenesis of CFTR in those with cystic fibrosis (CF), and CFTR-mediated sinusitis, 2. Determining genetic and environmental risk factors in unified airway disease, and 3. Developing novel imaging and teaching strategies for endoscopic sinus surgery. I have been funded by the NIH, the Cystic Fibrosis Foundation, and private corporations.

I am married to Dr. Esther Kim and am fortunate to see her every day at the hospital and at home – surviving our family of four kids.

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**Ning (Danny) Cheung, BMedSc, MBBS, MD, FRANZCO**

Dr Cheung is currently an Associate Consultant Vitreo-Retinal Surgeon who is specialised in managing cataract as well as both medical and surgical retinal conditions at the Singapore National Eye Centre. He is also an Assistant Professor of Ophthalmology at the Duke-NUS Medical School and a Clinician-Scientist at the Singapore Eye Research Institute.

Dr Cheung completed his undergraduate Medical Degrees from the University of Melbourne, Australia in 2004. There, he also subsequently obtained his postgraduate degree for Doctor of Medicine (Ophthalmology). Dr Cheung was trained as a General Ophthalmologist at the Royal Victorian Eye and Ear Hospital in Melbourne, and received his Australian Ophthalmology Specialist qualification in 2013. In addition, he completed 4 years of subspecialty fellowship training in Vitreo-Retina, including 2 years in Hong Kong, under the supervision of Professor David Wong, and 2 years at the Singapore National Eye Centre.

Furthermore, Dr Cheung has a strong research interest and an excellent academic track record in the fields of ophthalmic epidemiology, retinal imaging, diabetic retinopathy and other retinal diseases. He has published over 100 scientific papers and several book chapters. These include articles in prestigious high-impact journals such as the Lancet, British Medical Journal, Diabetes Care, Brain, Annals of Neurology, and Progress in Retinal and Eye Research. His publications are well cited, with a personal H-index of 39. He is currently a leading investigator for a number of eye studies in Singapore, including a clinical trial on neuroprotective therapy for retinal detachment, as well as clinical and laboratory studies on novel therapeutic targets for common retinal diseases, such as diabetic retinopathy, age-related macular degeneration and retinal vein occlusion. He is also developing new surgical instruments to improve surgery for retinal detachment. His research work has received national and international recognitions with several awards, such as the Australian Society for Medical Research High Commendation, Bayer’s Global Ophthalmology Award, Diabetes Research Innovation Award, and SingHealth Outstanding Research Award.

As a surgeon-scientist, Dr Cheung values quality in clinical patient care, as well as education and research. He cherishes his time with patients and provides them patient-centred eye care based on the best available scientific evidence. He also devotes time and passion in conducting translational research that aims to bring new scientific discoveries to clinical application to improve treatment and outcome of eyediseases.
Participants biographies

**Guido J. Falcone, MD, ScD, MPH**

I am a Neurologist with subspecialty training in Neurocritical Care and an Epidemiologist with expertise in Population Genetics. I graduated from the University of Buenos Aires and completed residency in Neurology at FLENI (Buenos Aires, Argentina). Driven by a growing interest in acquiring tools and experience in biomedical research, after residency I emigrated to the United States with a Fulbright Scholarship and completed a Doctorate in Genetic Epidemiology at Harvard School of Public Health and a clinical fellowship in Neurocritical Care at the combined program offered by Harvard Medical School and the Massachusetts General Hospital. I have now been recruited to Yale University to attend in the Yale-New Haven Hospital’s Neuroscience Intensive Care Unit and to develop a research program focused on Stroke Genomics.

The goal of my research is to understand how common and rare genetic variation influences the risk, severity, outcome and recurrence of stroke, with emphasis on primary, non-traumatic intracerebral hemorrhage. This work is conducted within the construct of the International Stroke Genetics Consortium (ISGC), where I have the pleasure of serving in the steering committee. For the past 2 years, I have been involved in the design, development and implementation of the Platform for Accelerating Genetic Discoveries in Cerebrovascular Disease (http://www.cerebrovascularportal.org/), an NIH-supported initiative to make stroke genomics data freely available to investigators from around world.

**Mark Friedberg, MD**

I was born in South Africa. At age 12-years, I moved with my family to Israel where I grew up and did the remainder of my schooling. I obtained my medical degree from the Ben-Gurion University of the Negev in Israel. I then specialized in pediatric medicine in Beer Sheva and Haifa, Israel. After completion of pediatric residency, I sub-specialized in pediatric cardiology and advanced imaging (echocardiography) at the Lucile Packard Children’s Hospital at Stanford, California, USA. At that time, I also did a clinical research fellowship through the Glaser Pediatric Research Network.

After completion of my fellowship in pediatric cardiology and then echocardiography, I moved in 2006 to Toronto for a staff position as a Paediatric Cardiologist at the Hospital for Sick Children. I am an Associate Professor of Paediatrics at the University of Toronto and an Associate Scientist in the SickKids Research Institute. I am currently Director of Echocardiography Research and a member of the editorial board of the Journal of the American Society of Echocardiography and the Journal of the American College of Cardiology: Cardiovascular Imaging.

My research interests are in the assessment of ventricular function in children with acquired and congenital heart disease, including the use of new echo technologies (strain imaging) to assess function. In synergy with my clinical research, I have established a translational research program investigating mechanisms of right ventricular dysfunction and ventricular-ventricular interactions in experimental models of pulmonary hypertension and right ventricular pressure-loading; and the potential to harness them for therapeutic benefit. Other research interests include assessment of incoordinate motion (dyssynchrony) in children and its treatment with cardiac resynchronization therapy.

I am married with 3 children ages 9,13,19. I enjoy good hiking, music, reading, company, food and wine.
Participants biographies

Tamar Green, MD

I am a physician-scientist and a child psychiatrist who work primarily with children who have attention and executive function deficits (ADHD and Learning Disabilities) and children with known genetic conditions (“neurogenetic syndromes” such as Noonan syndrome and other Rasopathies, Turner syndrome, 22q11.2 deletion syndrome). I gained my training as a child psychiatrist at the Beer Yaakov Mental Health Center, affiliated with Tel Aviv University in Israel. I have completed three years as a postdoctoral research fellow at the Center for Interdisciplinary Brain Sciences Research at the Department of Psychiatry and Behavioral Sciences at Stanford University.

My research focus is ADHD and associated deficits in cognitive functions. Although neurodevelopmental disorders, including ADHD, show high heritability, their complex genetics make it challenging to study specific genes involved in disease pathogenesis. This lack of knowledge affects the accuracy and precision of our diagnostic procedures and forces the field to rely on behavioral criteria. It also limits care for children with ADHD, as current therapies are symptom rather than mechanism based. One approach to overcome this challenge is to study ADHD subgroups, thereby enabling us a better understanding of the contribution of biological mechanisms to neurodevelopment. Through research, my goal is to provide a better understanding of the gene-brain-behavior interactions as pertains to attention and executive function. For example, the study of girls with Turner syndrome, caused by the absence of one out of two X chromosomes, provided new insights about X-linked mechanisms potentially leading to idiopathic ADHD.

Recently, I developed an interest in the Rasopathies, a collection of syndromes associated with genetic mutations affecting the Ras/MAPK pathway. Among the Rasopathies, I am specifically interested in Noonan syndrome. In my studies, I use cognitive and behavioral measures combined with multidimensional brain imaging methods. These studies are particularly directed at uncovering neural correlates associated with deficits in attention, memory and social skills in this syndrome. Results for this ongoing research also have the potential to yield valuable new insights into the role of the Ras/MAPK pathway in brain development in general, and attention, memory, and social skills. I am fortunate to have this research funded through both the Department of Psychiatry and Behavioral Sciences Small Grant Program Award and Stanford University Child Health Research Institute Award and the National Institute of Child Health and Human Development (NICHD).

Patricia D Jones, MD, MSCR

Patricia D Jones, MD, MSCR completed her undergraduate training at Johns Hopkins University in 2001. After working as a research assistant for one year, she attended Albany Medical College and graduated magna cum laude in 2007. Dr. Jones completed residency in Internal Medicine and Pediatrics at the University of North Carolina, Chapel Hill. After residency, she went on to receive subspecialty training in Gastroenterology and Transplant Hepatology, also at the University of North Carolina. Due to a unique training grant focused on Digestive Disease Epidemiology, Dr. Jones was able to begin formal training in research methods and obtained her Master of Science in Clinical Research in 2014.

In 2015, Dr. Jones was recruited to the University of Miami Miller School of Medicine to build a research program focused on hepatocellular carcinoma and cancer disparities. Through retrospective analysis, she confirmed the existence of disparities within the local health care system. This work was featured multiple times in the lay press, most notably at nbcnews.com, and was recently published. Through a diversity supplement awarded from the National Institute on Minority Health and Health Disparities, Dr. Jones has been using community-based participatory research to test the feasibility and acceptability of home-based screening for hepatitis B, a key cause of hepatocellular carcinoma globally. Other formative studies have involved the use of qualitative research to understand perceptions of chronic liver disease and hepatocellular among Black communities in South Florida.

Dr. Jones is a member of the American Association for Cancer Research and Minorities in Cancer Research. She is also a member of the American Association for the Study of Liver Diseases, where she serves on the Practice Guidelines Committee.
Participants biographies

Theo Kofidis, MD, PD(Ger), FRCS, FAHA, FAMS

Associate Professor Theo Kofidis is Head of Adult Cardiac Surgery at the Singapore National University Hospital, Senior Consultant Cardiothoracic Surgeon, an expert minimally invasive heart surgeon and avid researcher. He is a renowned Cardiac Surgeon and strongly sought-for proctor and surgical teacher around the world. One of only 2 AATS members in SE Asia, he is also an Ambassador / Steering Committee of the World Society for Cardiothoracic Surgery for the same region. He is Chairman of I.R.I.S. (Initiative for Research and Innovation in Surgery), has introduced various new technologies, and launched new types of less invasive surgery. Over the last 10 years in Singapore, he has established the most complete, pioneering and advanced Minimally Invasive Heart Surgery program in the region, and set up the most advanced hemodynamic research laboratory and Cardiovascular Surgical Research Group in Singapore, after winning numerous grants.

Professor Kofidis has trained in some of the world’s leading institutions (Rochester, NY/Texas Heart, Houston/Hannover Germany, Stanford, CA, USA). He is decorated with various international Awards and carries various offices and commitments internationally. He has lectured for the American Medical Association, the FDA, the Bill Gates Research Institute and more. As an academic teacher, proctor and Consultant for a number of companies in the field-related industry, he is holding events and workshops in various countries around the world, bringing Minimally Invasive knowhow doctors and patients alike.

Professor Theo Kofidis lives in Singapore with his wife Persephone and daughter Danai, loves to fly airplanes, photograph, work out and read.

Sara Kreimer Barron, MD

Dr. Sara Kreimer is a physician completing her third year of pediatric hematology-oncology fellowship at Lucile Salter Packard Children’s Hospital, Stanford. She was born and raised in Southern California. She received her Bachelors of Arts in Biological Sciences and Religion from the University of Southern California in 2007. During this time, she worked in Dr. Christian Pike’s laboratory at the USC Davis School of Gerontology studying the effects of sex hormones in mouse models of Alzheimer’s disease, and in doing so, began cultivating her interest in translational research. She received her medical degree from the Keck School of Medicine and was elected to the prestigious Alpha Omega Alpha Honor Society in 2011. She subsequently completed her pediatric residency at LAC USC Medical Center and began her pediatric hematology-oncology fellowship at Stanford University in 2015. She joined Dr. Michelle Monje’s laboratory and is currently working on a high throughput drug screen conducted in collaboration with the National Center for Advancing Translational Sciences to test ~2,000 compounds to identify the most promising combination therapeutic agents for diffuse intrinsic pontine glioma (DIPG), a universally fatal pediatric disease. She has validated her findings in vivo and in vitro in an orthotopic xenograft mouse model utilizing patient-derived DIPG cell cultures. Importantly, Dr. Kreimer’s findings in non-pontine diffuse midline gliomas, specifically thalamic and spinal cord H3K27M+ variants, have been integral to deciding to include patients with these diseases in ongoing clinical trials currently limited to patients with DIPG. She plans to continue her career conducting translational research in developmental therapeutics in pediatric neuro-oncology. In her free time, she enjoys playing music and traveling with her husband.
**Kate Lykke Lambertsen, MSc, PhD**

Kate Lykke Lambertsen graduated as a MSc from the University of Southern Denmark in 1999. She initiated her training in experimental neurobiology in the Department of Anatomy and Neurobiology, University of Southern Denmark, supervised by dr. Bente Finsen, when she was a master student. Following graduation in 1999 she became a PhD student in experimental neurobiology in the same department (maternity leave: December, 2001 – July, 2002). In 2004 she defended her PhD thesis entitled “The pathophysiological role of tumor necrosis factor and interferon gamma in focal cerebral ischemia in mice”. In 2005-2008 (maternity leave: March, 2005 – October, 2005) she did her first post doc funded by the Danish Medical Research Council at the Bente Finsen Laboratory, Medical Biotechnology Center, University of Southern Denmark.

In 2008-09 she was a visiting scientist at the Miami Project to Cure Paralysis, University of Miami Miller School of Medicine, in the laboratory headed by dr. John Bethea, funded by a grant from Carlsbergfondet. Upon her return to Odense, she was appointed an associate professor in Anatomy and Neurobiology at the Department of Neurobiology Research, Institute of Molecular Medicine, University of Southern Denmark. In March 2016, Kate Lykke Lambertsen was cross-affiliated with the Department of Neurology, Odense University Hospital as a clinical associate professor with research responsibilities and in August 2017 she was appointed vicehead of the neuroscience center BRIDGE (Brain Research – Inter-Disciplinary Guided Excellence, www.sdu.dk/bridge), University of Southern Denmark, Odense University Hospital and the Region hospitals in the Region of Southern Denmark. Kate Lykke Lambertsen was a board member of the Danish Society for Neuroscience 2007-2011

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**Chengzu Long, PhD**

Chengzu Long, PhD, a Principal Investigator and Assistant Professor, is currently conducting research on advancing novel genome editing technology to model and treat monogenetic diseases at New York University School of Medicine’s Leon H. Charney Division of Cardiology. After receiving his bachelor’s degree in bioengineering, he earned a Master of Science degree in microbiology and then worked at the National Institute of Biological Science, Beijing, where he studied pathogen-host interactions. Dr. Long then went to the University of Texas Southwestern Medical Center for his doctoral work and joined Dr. Eric Olson’s laboratory to study mechanisms of degenerative disease using mouse models with genetic modifications.

Using clustered regularly interspaced short palindromic repeats (CRISPR)/CRISPR-associated protein 9 (Cas9) genome editing, Dr. Long successfully prevented muscular dystrophy in a mouse model of Duchenne muscular dystrophy (DMD) (Long et al., Science. 2014; Long et al., Science. 2016). This paved the way for novel genome editing-based therapeutics in DMD. Dr. Long has advanced genome editing to cells from DMD patients by engineering the permanent skipping of mutant exons in the genomes of DMD patient-derived induced pluripotent stem cells (iPSCs). To address several challenges for clinical applications of gene editing in humans and to test these human DMD guide RNAs in animal models, they generated “humanized” mouse models of DMD by introducing the human exon mutations into the mouse Dmd locus. Genome editing with novel strains of humanized mice, as well as cardiomyocytes derived from patients cardiomyocytes (Long et al. Science Advances. 2018), has enabled researchers to optimize the correction of DMD mutations, providing a path toward a potential cure of the disease in patients. Long lab’s long-term goal is to adapt gene editing to postnatal cardiac and skeletal muscle cells and to leverage this approach to correct muscular dystrophy and other genetic diseases caused by mutations in humans.
Participants biographies

Yvette Luiking, PhD

Mrs. Yvette Luiking, PhD (the Netherlands), is currently a Research Program Leader for the Advanced Medical Nutrition division at Nutricia Research in the Netherlands. In this role she is responsible for new product formulations and evidence generation on medical nutrition products for patients with disease-related malnutrition and frailty. This implies the translation from scientific knowledge in patient-relevant nutritional product concepts with proven benefits. This includes a broad range of activities: observational studies, clinical trials, preclinical research, patent applications, research collaborations with internal and external experts in the field, public-private partnerships and subsidy applications, and cross-functional collaboration with commercial partners. She supervises a team of 6 scientists.

She started her career within the company in 2006 after 7 years of Post-doc research on clinical nutrition and protein and muscle metabolism at Maastricht University Hospital/Maastricht University, the Netherlands. She has a PhD in gut physiology from Utrecht University, the Netherlands (1999) and an MSc in Nutrition and Health from Wageningen University, the Netherlands (1994).

She has an affiliation as assistant professor at the Center for Translational Research on Aging & Longevity at Texas A&M university in the USA. She has published 66 articles in peer-reviewed international journals, is a co-author on 4 book chapters, and co-inventor of 4 patents.

Jurjen Luykx, MD, PhD

During my PhD project, which I finished in 2013, I demonstrated how targeting cerebrospinal fluid deepens the understanding of behavioral and genetic mechanisms in humans. I finished my training as a psychiatrist in 2012. I have been heading the Psychiatric Genetics Program of the Human Neurogenetics Unit at the Brain Center Rudolf Magnus (BCRM) of the University Medical Center in Utrecht, the Netherlands, for four years. Here, I focus on DNA/RNA sequencing and biochemical analyses of body fluids in psychosis. The two overarching goals of my work are: 1) improving genetic counseling in psychiatry by using genetic data; and 2) prediction of treatment response (including side effects) by the use of genetic data. My main research projects are about genetics-informed prediction of clozapine response (www.clozinstudy.com) and using cerebrospinal fluid to dissect the involvement of neuronal surface antibodies in psychosis.

My clinical position is at a community hospital in Amersfoort, the Netherlands, where I see patients with severe psychiatric illness, most of whom are inpatients. I aim at cross-pollination with academia, hopefully allowing patients to more readily benefit from scientific discoveries.
Participants biographies

Anupama Naria, MD

Anupama Narla MD, an assistant professor of pediatrics (hematology/oncology), studies the pathophysiology of ribosomopathies (human disorders of ribosome dysfunction) and the mechanism of drugs that promote red blood cell production in these conditions. She completed her B.A. in Biomedical Ethics and Human Biology at Brown University followed by a MD at the University of Pennsylvania. She did a pediatric residency at the University of California – San Francisco followed by a fellowship in hematology/oncology at Children’s Hospital Boston/Dana Farber Cancer Institute. During her fellowship training/instructorship, she worked in the lab of Benjamin Ebert MD PhD at Brigham and Women’s Hospital. She accepted a faculty position at Stanford University in 2013 and continues to see pediatric hematology patients as well as running a lab. The goal of the Narla lab is to ask specific translational questions in pediatric hematology that will contribute both to patient management as well as scientific discovery in rare cases of bone marrow failure. In addition to the work in the laboratory, Dr. Narla is also involved in several national studies to further understand these unusual diseases. Dr. Narla was recently named the Tashia and John Morgridge Faculty Scholar in Pediatric Translational Medicine. She also received the McCormick and Gabilan Faculty Award as well as funding support from the American Society of Hematology and the NIH.

Joanne Ngeow, MBBS, FRCP, MPH

Dr Joanne Ngeow is a Senior Consultant in Division of Medical Oncology at the National Cancer Centre Singapore (NCCS). She currently heads the NCCS Cancer Genetics Service with an academic interest in hereditary cancer syndromes and translational clinical cancer genomics. Her current clinical focus and research revolves around understanding cancer predisposition by studying cancers clustering in families, young adults and in families with multiple/rare cancer presentations. After completing her undergraduate medical studies at the University of Melbourne, Australia, in 2001, she completed her Internal Medicine training at the Singapore General Hospital and trained in Medical Oncology at NCCS. She was awarded consecutive fellowships to complete formal clinical and bench training at the Genomic Medicine Institute, Cleveland Clinic, Ohio. In 2014, A/Prof Ngeow returned to NCCS to spearhead the systematic implementation of the clinical cancer genomics into routine oncology care at NCCS through the establishment of the Cancer Genetics Service. She completed her Masters of Public Health at the Bloomberg School of Public Health, Johns Hopkins University, in 2015 with a focus in cancer epidemiology and health economics making her one of a handful of individuals globally with skills spanning translational science, clinical genetics and health services research. She serves on many local and international advisory/expert panels on how to implement genomics into routine clinical practice. She has been awarded the Early Investigator Award by the Endocrine Society in 2016 for her contributions into thyroid cancer research. She has received consecutive Merit Awards by the American Society of Clinical Oncology for her research in hereditary cancers. She has published over 80 peer reviewed papers in such journals as the Journal of Clinical Oncology, Annals of Oncology, Human Molecular Genetics, Journal of Clinical Endocrinology and Metabolism, Gastroenterology. She is an Associate Editor for Endocrine-Related Cancers. She recently received clinician-scientist career development awards: the NMRC Transition Award (2014-2016) and Clinician Scientist Award in 2017.

Fun facts: She loves travelling, photography and art and she is at present studying Asian art history in her “free” time. She also loves bingeing on Netflix – and is excited about completing 2 bucket list items this year- going to the San Diego Comic Con and gorilla trekking in Rwanda.
Participants biographies

Thomas D. Prevot, PhD

Thomas D. Prevot is a post-doctoral fellow at the Centre for Addiction and Mental Health (Canada) that completed his Ph.D in preclinical neuroscience at the University of Bordeaux (France). His long-term research focus is centered on understanding cellular and behavioral changes related to stress-induced and age-related disorders. After a first post-doctoral training focused on identifying the dynamic changes that occur at the cellular level in the prefrontal cortex and transfer an organism from a reactive state to a pathological state, he is now in charge of leading the drug development project initiated by Dr. Etienne Sibille, in order to target the GABA deficit responsible for cognitive and mood deficits in depression, Alzheimer’s disease, and normal and pathological aging.

Consistent with his background in ethology and biology, Dr. Prevot is a successful behavioral pharmacologist, specialised in rodent model of anxiety and depression, who has expanded his repertoire to molecular biology approaches during his postdoctoral fellowship. His expertise in behavioral neurosciences and his knowledge on somatostatin neurotransmission and molecular changes associated with stress are invaluable assets to develop new tools to screen cognition and anxiety. He also has a keen interest in working across disciplines and his work allows for excellent cross-disciplinary training and opportunities to build lasting collaborative relationships.

His professional goals are to further embark on a full-time career in translational psychopharmacology, from scientific findings to therapy applied to human diseases, where he can make an impact on mental health research in Canada and worldwide.

Guus Roeselers, PhD

Dr. Guus Roeselers has been active in the field of Microbial Ecology for more than 15 years. He received his PhD in Environmental Biotechnology in 2007 at Delft University of Technology, the Dutch cradle of microbiology. Subsequently, he received a grant from Netherlands Organisation for Scientific Research (NWO) and moved to the US for postdoc research at Harvard University. Here he stayed several years conducting research on various host-microbe interaction topics.

In 2010 he was appointed as senior scientist at the Dutch Organisation for Applied Scientific Research (TNO). Here, his research shifted to the microbiology & systems biology of the human gut in relation to health and nutrition. In 2015, Roeselers joined Danone - Nutricia Research to lead the Gut Microbiology research group which studies interactions between health, nutrition and the intestinal microbiome during the very early phases of human life and in patients. Roeselers is chair of the Microbial Ecology section of the Royal Dutch Society for Microbiology and serves on the editorial boards of several scientific journals. He has (co)authored more than 40 scientific publications.
Participants biographies

Romanoski Casey, PhD

Dr. Romanoski is an Assistant Professor of Cellular and Molecular Medicine at the University of Arizona. Within the University, Dr. Romanoski is a Faculty Fellow of the BIO5 Institute, a member of the Genetics Interdisciplinary Graduate program, and a member of the Center for Applied Genetic and Genomic Medicine.

Dr. Romanoski received her Ph.D. in Human Genetics in 2010 from the University of California, Los Angeles where her studies focused on the genetics of gene expression under mentorship of Aldons (Jake) Lusis Ph.D. – a pioneer of the field of systems genetics, who has published over 500 peer-reviewed articles. Dr. Romanoski’s postdoctoral work was completed in the laboratory of National Academy of Sciences Member, Christopher K. Glass M.D., Ph.D., at the University of California, San Diego. Here, Dr. Romanoski investigated how natural genetic variation could be used to discern hierarchical and cooperative mechanisms of transcription factor function genome-wide.

Dr. Romanoski’s laboratory is focused on understanding the function of the human genome with an emphasis on elements that regulate proper endothelial function. Approaches leverage high-throughput sequencing data to better understand interplay between genome sequence, transcription factor binding, epigenetic modifications, and gene expression. One line of investigation aims to discover endothelial-specific transcription factors, their cistromes, and co-occupancy patterns in homeostasis and inflammation. Another aim is to identify causal genetic variants and the molecular mechanisms by which sequence variation predisposes individuals to develop heart disease. This work is both experimental and computational and integrates public and private datasets.

Marco Ruggeri, PhD

Marco Ruggeri is an assistant professor in the department of ophthalmology and co-director of the Bascom Palmer Eye Institute’s Ophthalmic Biophysics Center at the University of Miami Miller School of Medicine. The Ophthalmic Biophysics Center is a research laboratory dedicated to the development of technologies designed to improve patient eye care. His current research focuses on the development of optical instrumentation and quantitative imaging technologies for diagnostic and surgical guidance applications in ophthalmology. He serves as a lead investigator on both federally and university-funded projects aimed at optimizing the visual outcomes of cataract surgery.

He also serves as co-investigator on federally and industry-sponsored projects focused on studying the mechanism of accommodation and presbyopia, the relationship between the optics and anatomy of the eye, and the biomechanical and optical properties of ocular tissues. He has collaborated with industry partners to develop intraoperative high-resolution optical coherence tomography systems for ophthalmic microsurgical guidance and diagnosis of retinal diseases in pediatric patients. Ruggeri is also an instructor in Bascom Palmer Eye Institute’s master’s program in visual science and investigative ophthalmology, where he coordinates a course on basic and applied optics. He serves on the program committee of the Ophthalmic Technologies Conference at the SPIE Photonics West annual meeting. He received Bachelor and Master of Science degrees in Electrical Engineering from the University of Modena and Reggio Emilia in Italy in 2003. He earned his PhD in Biomedical Engineering from the University of Miami in 2011. He completed a post-doctoral fellowship at Bascom Palmer Eye Institute before being hired as a faculty member by the Department of Ophthalmology in 2013.
Participants biographies

**Anamika Singh, PhD**

Anamika Singh is an Assistant Professor at Cardiovascular and Metabolic Disorders Research Program at Duke-NUS Medical School, Singapore. She has had an interdisciplinary research career from population genetics-genetic epidemiology to translational clinical research to basic science, with a strong commitment and passion to understand human diseases and to find the best health outcomes in terms of treatment. The long-term goal of her research is to perform bench to bedside research. Dr. Anamika did her PhD in molecular biology and genetics from Jadavpur University, India and moved to USA for her postdoctoral studies. After a brief postdoc at Pennstate University, Hershey, she joined Temple University School of Medicine in Philadelphia, USA as a postdoctoral fellow. Her research focused on prothrombotic mechanisms and the risk of cardiovascular diseases in metabolic disorders like hyperglycemia, diabetes and obesity. Her research experience also included clinical trial studies on diabetes patients with stroke, and phase II studies in patients with prostate cancer. She worked as an Assistant Scientist for 2 years at Temple University School of Medicine, USA before moving to Duke-NUS Medical School Singapore as an Assistant Professor. In Singapore, however her research is more basic science focusing on mouse models of cardiovascular diseases and diabetes. Her current research includes mechanisms of cardiac development and diseases, and diabetic cardiovascular diseases in mouse models. To further strengthen her translational research skills, Dr. Anamika has undertaken Clinical Research Certificate Program (CRCP) from Duke-NUS-SingHealth, and Singapore Guideline for Good Clinical Practice (SGGCP) in 2015. The ultimate goal of her research is to directly utilize the lab research in a clinical setting to enhance patient care. At present she is member of Academic Medicine and Research Institute (AMRI), Singhealth Duke-NUS Academic Medical Centre in Singapore, and a member of North American Society on Thrombosis and Hemostasis (NASTH). She is also an editorial board member of ISRN Biotechnology, and serves as grant reviewer for South African Medical Research Council (SAMRC).

**Manpreet K. Singh, MD, MS**

Dr. Singh is an Assistant Professor of Psychiatry and Behavioral Sciences, and Director of the Pediatric Mood Disorders Program and the Pediatric Emotion And Resilience Lab (PEARL) at Stanford. Her time is divided among clinical, research, and teaching missions at Stanford. She leads an integrated multidisciplinary team of psychiatrists, psychologists, clinical fellows, research postdoctoral fellows, residents, medical students, research coordinators, and data analysts to evaluate and treat youth with a spectrum of mood disorders along a developmental continuum. Her research focuses on investigating the origins and pathways for developing mood disorders during childhood, as well as on methods to protect and preserve function after symptom onset. She recently completed her National Institute of Mental Health career development award that characterized emotion regulation in healthy offspring of parents with bipolar disorder. In 2013, she was endowed with a Faculty Scholar Award in Pediatric Translational Medicine and is currently leading three independent NIMH funded studies examining mechanisms underlying mood disorders and their treatment. She is examining the neural benefits of pharmacological interventions, transcranial magnetic stimulation, family focused psychotherapy, and mindfulness meditation to reduce mood symptoms and family stress. She is also investigating the potential risks of antidepressant therapy in youth offspring of parents with bipolar disorder. These areas of research hold considerable promise to impact our understanding of the core mechanisms and early interventions for pediatric mood disorders. Dr. Singh mentors undergraduate, graduate, and medical students, training residents, clinical fellows, and post-doctoral fellows in the departments of Psychiatry, Psychology, and Neuroscience at Stanford. Dr. Singh earned her MD at Michigan State University and her MS at University of Michigan. She completed her combined and integrated residency training in Pediatrics, Psychiatry, and Child and Adolescent Psychiatry at Cincinnati Children’s Hospital Medical Center. After two years of postdoctoral training at the Center for Interdisciplinary Brain Sciences Research at Stanford University, she joined the faculty at Stanford in 2009.
Participants biographies

Michael Salvatore Taccone, MD, PhD Candidate

Michael is a senior resident of neurosurgery at the University of Ottawa and a PhD student at the University of Toronto in the laboratory of Dr. James Rutka at the SickKids Research Institute in Toronto. His clinical interests and research interests are within the area of neuro-oncology, novel therapeutics, neurodiagnostics, and drug delivery. He has led and collaborated on several clinical and basic research projects predominantly focused on high grade gliomas. Clinically and scientifically, his goal is to lead a patient-focused, neuro-oncology research laboratory at a major pediatric center. In this way he hopes to promote personalized research and bridge the gap between bench and bedside for children with brain tumors.

Beyond academia, Michael is passionate about healthcare innovation and technological endeavors which ultimately translate into improved patient experiences and increased patient autonomy. He volunteers his time with various knowledge translation groups such as Hacking Health and the Institute for Leadership in Engineering at the University of Toronto. Michael is also a childhood cancer survivor and works closely with the Pediatric Oncology Group of Ontario as a survivorship advisor and survivor committee chair to impact pediatric cancer care in Ontario. In his free time, he enjoys hiking, skiing, and wine crafting.

Sriram Vaidyanathan, PhD

Sriram Vaidyanathan was born in Thiruvananthapuram, India in 1988. He graduated from Purdue University in 2010 with a B.S.E. in Biomedical Engineering. He joined the Banaszak Holl group at the University of Michigan in 2011 and obtained a M.S.E in Biomedical Engineering in 2013. As a doctoral student, he studied the intracellular transport of non-viral gene delivery vectors to optimize delivery. He completed his Ph.D in 2016 and joined the Porteus lab at Stanford University to further his interest in gene therapy by applying CRISPR/Cas9 based genome editing for monogenic diseases. Over the past two years, he has been working on genome editing the cystic fibrosis locus in airway stems cells. In the long-term future, his goal is to use his training bioengineering, drug delivery and genome editing to develop treatments for congenital and degenerative disorders. He would pursue these goals either by establishing an independent academic research laboratory or as a scientist working in the biotech industry.
Participants biographies

Marc van Mil, PhD

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

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

http://www.universiteitvannederland.nl/college/wat-doet-dna-nou-eigenlijk-precies/


Erwin (WE) van Spil, MD, PhD

Erwin van Spil, 34 years old, studied both veterinary medicine and medicine. He combined his studies with PhD research into biochemical markers for knee and hip osteoarthritis. He then started a rheumatology residency and is now working at the University Medical Center in Utrecht, the Netherlands. He combines clinical work, research and teaching. As a researcher, Erwin is one of the main investigators leading the clinical osteoarthritis research in the department. His work mostly includes epidemiological research in cohort studies and trials.

He is aiming to create the optimal conditions for translating findings from this work to clinical practice. He is looking forward to learn more about this process and exchange thoughts with colleagues, especially other clinical-translational researchers working on very common, yet less “academic” diseases. Erwin lives in Amsterdam and enjoys many things in his spare time, particularly visiting the theater, eating out, singing and travelling. He has just returned from a fantastic research exchange project in Sydney, Australia.
Participants biographies

Rebecca Vanderpool, PhD

Dr. Vanderpool is an Assistant Professor at the University of Arizona with a joint appointment in the Division of Translational and Regenerative Medicine and Department of Biomedical Engineering.

She received her PhD training in Biomedical Engineering at the University of Wisconsin-Madison and completed two postdoctoral trainings before starting at the University of Arizona in the Fall of 2016. During her postdoctoral training in physiology at the Université libre de Bruxelles, Dr. Vanderpool developed analysis techniques to non-invasively measure right ventricular function from echocardiography imaging in patients with pulmonary hypertension. During her postdoctoral training in medical informatics and clinical research at the University of Pittsburgh, Dr. Vanderpool developed analysis techniques that use a combination of signals from pressure transducers, echocardiography imaging, and magnetic resonance imaging (MRI) to quantify right ventricular function in patients with pulmonary hypertension.

As a new faculty member, she is establishing a new lab with a research focus in the areas of cardiovascular hemodynamics, pulmonary vascular stiffness and right ventricular function. She is currently working to develop new prognostic and diastolic markers of right ventricular function in patients with pulmonary vascular disease. By using translational approaches to research, Dr. Vanderpool hopes to identify molecular mechanism of right ventricular failure that could be potential drug targets. She has published widely in the areas of right ventricular function and pulmonary hypertension.

Maud Verhoef-Jurgens, PhD

Maud Sophie Verhoef-Jurgens was born on April 6th 1979 in Groningen, the Netherlands. In 1998, she started medical school at the VU University in Amsterdam. After two years, she decided to switch to physiotherapy and started this study at the “Hogeschool van Amsterdam” (HvA). During her 3rd year, she performed one of her three internships at the General Hospital in Livingstone, Zambia. For her physiotherapy study she performed her final thesis on questionnaires in the field of arthritis, this thesis was granted with honour. In September 2004 she obtained her physiotherapy Bachelor of Health (BHealth) degree.

Following her graduation, Maud returned to Zambia. There she worked at management level, her main job being manager of the “Royal Livingstone Spa”, affiliated to the 5-star Royal Livingstone Hotel in Livingstone, Zambia.

After she returned to the Netherlands in 2007, she worked as a physiotherapist, in first, second and third line settings, her main interest lying in rehabilitation of the elderly. She also started the Master of Science “Evidence Based Practice” (clinical epidemiology) at the University of Amsterdam (UvA) . She graduated in October 2010.

In January 2011 she started as a PhD candidate at the department of Rheumatology and Clinical Immunology at the University Medical Center Utrecht under supervision of JW Jacobs, PMJ Welsing, professor FPJG Lafeber and professor JWJ Bijlsma. To expand her epidemiological and statistical knowledge and to be able to register as Epidemiologist B when finishing her PhD, she entered the Epidemiology PhD program of the graduate school for Life Sciences at the Julius Center in Utrecht. Following her PhD defence, she was asked to join the Julius Center to become the Programme coordinator for the MSc and PhD programmes Epidemiology.

Currently she is living in Bussum, the Netherlands with her husband, three children and her Zambian dog.
Participants biographies

Robert (Rob) Wykes, PhD

Rob gained a 1st class Honours degree in Physiology from the University of Edinburgh. He gained a PhD in cell physiology and pharmacology from Leicester University under the supervision of Dr Elizabeth Seward. His thesis examined how calcium sensitive proteins such as calmodulin regulate voltage-gated calcium channels to modulate neurotransmitter release.

He then went to America for a post-doctoral position in the Feinburg School of Medicine at Northwestern University, Chicago under the supervision of Dr Jack Waters and Dr Pavel Osten. Here he learnt brain slice electrophysiology, 2-photon calcium imaging and stereotaxic injection of viral vectors into discreet areas of rodent brains. Returning to the UK he worked as a senior post-doctoral fellow at the UCL Institute of Neurology under the supervision of Profs Kullmann, Walker and Schorge. Here he developed rodent models of neocortical epilepsy and gene therapy approaches to treat epilepsy. His work resulted in a Science Translational Medicine paper and further research in the area has resulted in a >£1M DPFS grant awarded to the project superiors to move gene therapy for epilepsy to clinical trial. In 2015 he was awarded a 3 year Epilepsy Research UK Fellowship to develop novel imaging technologies to visualise seizure propagation patterns across the neocortex resulting in a recent Nature Communication publication. Dr Wykes is currently funded by the EU as part of the Graphene Flagship project to develop graphene based grids of electrodes for epilepsy research and by a research grant awarded by the Rosetrees Trust to develop novel gene therapy approaches for epilepsy.

Joo Guan Yeo, MBBS, MMed (Paediatrics), MRCPCh (UK), PhD

Dr Yeo Joo Guan is a Consultant in Paediatric Medicine in KK Women’s and Children’s Hospital. He earned his M.B.B.S. and Masters of Medicine (Paediatric Medicine) from the National University of Singapore (NUS) in the year 2000 and 2006 respectively. During his advanced speciality training, he obtained his Ph.D. from the Department of Microbiology, Immunology programme, NUS, on the role of serine protease C1s in lupus pathogenesis supported by the Ministry of Health’s Healthcare Research Scholarship in 2014.

Following the completion of his advanced speciality training in 2015, he was mentored by Professor Salvatore Albani (Translational Immunology Institute), working on the holistic, multi-dimensional interrogation of the immunome of childhood onset Systemic Lupus Erythematosus with the dual translational goals of identifying predictors of clinical fate and novel therapeutic targets for manipulation.

He is happily married with 6 children and has a supportive wife seeing him through his endeavour to become a successful clinician scientist with the hope of making a difference in improving the care of paediatric rheumatological patients through translational medicine.

In his free time, he is actively involved in organising outdoor scouting activities for children as a volunteer adult leader. He believed that influencing the next generation either through a holistic education in non-academic skills, in addition to his work as a researcher are important life goals that are worth pursuing.
Participants biographies

Patrick Yu Wai Man, BMedSci, MBBS, PhD, FRCPath, FRCOphth

I recently relocated to the University of Cambridge from Newcastle University where I was a Medical Research Council (MRC) Clinician Scientist and a Senior Lecturer based within the Wellcome Trust Centre for Mitochondrial Research. I am also affiliated with Moorfields Eye Hospital and the UCL Institute of Ophthalmology in London as part of a strategic collaboration that I have set up with the Cambridge Centre for Brain Repair and the MRC Mitochondrial Biology Unit.

I am an academic neuro-opthalmologist with a major research interest in mitochondrial genetics and inherited eye diseases. My research group is focused on new gene discovery and we are using a multipronged approach to dissect the disease pathways contributing to progressive neuronal loss and blindness, including zebrafish models and patient-derived induced pluripotent stem cells.

I coordinate a specialist clinical service for patients with mitochondrial eye diseases in Cambridge, Newcastle and London. This has allowed me to establish a national cohort of patients with inherited optic neuropathies and I am using this unique resource for deep phenotyping, biomarker profiling and to push forward with an active translational research programme, including gene therapy. I am currently the Principal Investigator for two pivotal gene therapy trials (RESCUE and REVERSE) for Leber hereditary optic neuropathy (LHON). In parallel, I am consolidating links, both nationally and internationally, with academic and industrial partners interested in developing new therapeutic pipelines for inherited eye diseases.

Zane Zeier, PhD

Zane Zeier, Ph.D., is an Assistant Professor at the Department of Psychiatry & Behavioral Sciences and member of the Center for Therapeutic Innovation at the University of Miami, Miller School of Medicine. Dr. Zeier earned his Bachelor’s degree in Biochemistry and Psychology at Montana State University and his doctorate at the University of Florida where he studied neuroscience and the potential for viral vectors to restore brain function in Fragile X syndrome. His primary area of expertise and research efforts concern a family of neurological disorders caused by repeat expansion mutations. Currently, Dr. Zeier investigates a genetic form of amyotrophic lateral sclerosis and uses cellular reprogramming technology to generate neurons and cerebral brain organoids from available patient tissues. With these neuronal model systems, he investigates the underlying basis of disease with the goal of identifying therapeutic targets and small molecules through early stage drug development.
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