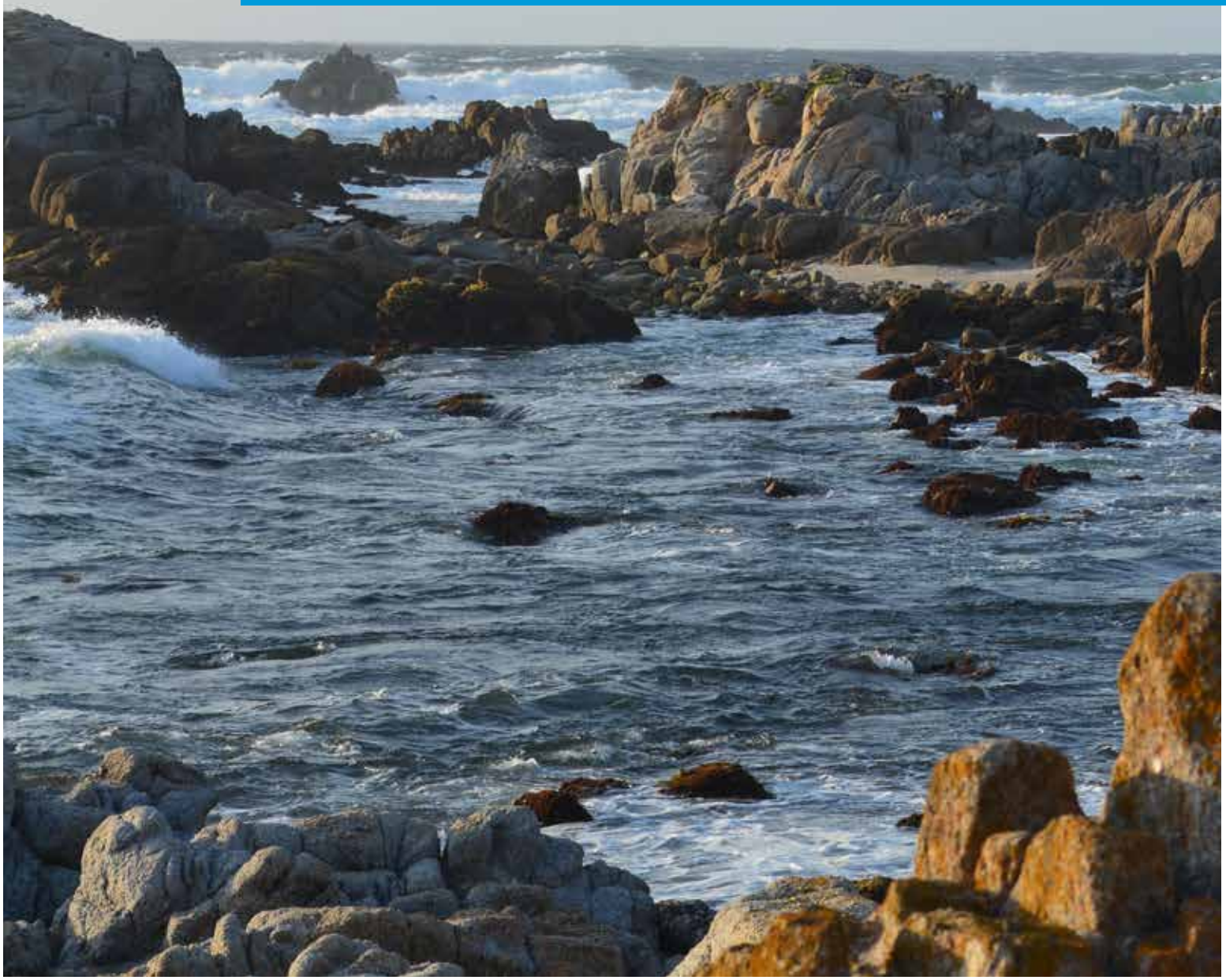
Stanford Maternal and Child Health Research Institute

Eureka Certificate Course in Translational Medicine

February 9-13, 2020

Asilomar Conference Grounds, Monterey, CA



STANFORD
MATERNAL & CHILD HEALTH
RESEARCH INSTITUTE

EUREKA
INSTITUTE
for translational medicine

Building a global community of translational medicine professionals

Stanford MCHRI's Translational Medicine Mission

The goal for this course, along with all of our other efforts in this exciting research area, is to develop a local community of translational medicine (TM) professionals equipped to catalyze the application of discoveries in maternal and child health by leveraging the resources and expertise that are uniquely Stanford.

Overall Educational Objectives

The curriculum will be delivered by Eureka Institute alumni and faculty, and subject matter experts who bring experience from academia, industry, regulatory agencies, venture capital, intellectual property law, etc.

The course will:

1. Facilitate the transfer of knowledge of TM for all learners through diverse teaching approaches
2. Analyze the business, scientific and regulatory aspects of TM
3. Explore the challenges professionals encounter in TM, including accessing mentorship, building successful teams and developing healthy interdisciplinary collaborations
4. Develop critical thinking skills to approach the challenges in TM
5. Develop communication skills for presenting complex scientific ideas to a broad spectrum of people
6. Share with learners information about Stanford resources in Intellectual Property and TM resources

Educational Strategies

The course will feature 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.

Thanks to our Support

It is with great appreciation that we thank our strategic partner, the Eureka Institute for Translational Medicine, for all their support that went into the creation of this unique program. Their experience in training in this field for the last 12 years has been a blessing to all those involved as we sought to create a course that is robust and focused on the resources available here at Stanford.

Stanford MCHRI Course Executives

Mary Leonard, MD, MSCE
Director of Stanford Maternal & Child Health Research Institute; Professor and Chair of Pediatrics, Stanford School of Medicine; Physician-In-Chief, Lucile Packard Children's Hospital Stanford

Anthony Oro, MD, PhD
Co-Director of Stanford Maternal & Child Health Research Institute; Professor of Dermatology, Stanford School of Medicine; Co-Director of Stanford Center for Definitive and Curative Medicine

Maria Grazia Roncarolo, MD
Professor of Pediatrics (Stem Cell Transplantation) and of Medicine (Blood & Marrow Transplantation), Stanford School of Medicine; Director of Stanford Center for Definitive and Curative Medicine; Co-Director of Institute for Stem Cell Biology and Regenerative Medicine, Stanford School of Medicine

Mary Chen, MS, MBA
Assistant Dean of Maternal and Child Health Research; Executive Director of the Stanford Child Health Research Institute

Eureka Institute for Translational Medicine Leadership

Janet Hafler, EdD
Professor of Pediatrics (General Pediatrics), Associate Dean for Educational Scholarship, Director of Teaching and Learning Center, Yale School of Medicine

Vicki Seyfert-Margolis, PhD
Board Chairman, Eureka Institute; CEO & Founder, MyOwnMed, Inc.

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

Berent Prakken, MD, PhD
Professor of Paediatric Immunology; Vice Dean for Education, University Medical Centre Utrecht; CEO/Secretary, Eureka Institute

Tanneke Zeeuw, MSc
Chief Operating Officer, Eureka Institute

Stanford Eureka Alumni Contributors

Tamar Green, MD
Mingxia Gu, MD, PhD
David Hong, MD
Manpreet Singh, MD, MS
Marko Jakovljevic, PhD
Melissa Mavers, MD, PhD
Trung Pham, MD, PhD
Thomas Robinson, MD, MPH
Zachary Sellers, MD, PhD
Sriram Vaidyanathan, PhD

Welcome to the Eureka Community!

Dear Participant,

It is with a mix of pride, great expectations and trepidation that we welcome you to the course “MCHRI Eureka Certificate Course in Translational Medicine”, an initiative which is inspired by and is an integral part of the Eureka Institute for Translational Medicine. Our objective is not to provide you with certainties or burden you with pre-digested knowledge, but rather to inspire you questioning your own notions and hopefully gently shake their foundation. What we seek is what you seek: to shorten the distance between the unmet need and its solution by inspiring and catalyzing a Copernican revolution in medicine, one which puts patients in the center of the process, one which will truly make a difference in the way we conceive and practice in our respective fields.

Salvatore Albani, MD, PhD

Translational Medicine faces many challenges and the only way to solve this definitely is to work together and find new solutions for the pressing problems we face. Eureka was founded over a decade ago to do just that, and to empower young translational scientists to overcome the many hurdles between bench and bedside.

You will have the opportunity to forge a new vision of Translational Medicine, one where study design, clinical and scientific questions, even policies, are molded around the patient. This school offers you all possibilities to explore and find your own personal role in this exciting field. A line up of experienced and innovative leaders is ready to help you to take the next steps in your career.

Berent Prakken, MD, PhD

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

We wish you an inspiring meeting!

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

Berent Prakken, MD, PhD
Professor of Paediatric Immunology
Vice Dean for Education, University Medical Centre Utrecht
CEO/Secretary, Eureka Institute

About the Course

In this booklet, you will find:

- **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. The program materials are organized chronologically and each session is listed with its core learning objectives. Most days will start at 8:00am with coffee and brief social period, which will segue into the first session of the day (at 8:30am). 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.

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 139,000 papers, while a Google search yields nearly 36,600,000 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 the opinion of those that designed this course, 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 that makes a significant difference in the lives of patients. 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.

Key Information

- Coffee Service and Informal Discussion: 8:00am
- Debriefing: 8:30am
- Start Time: 9:00am
- Events: Sunday, Tuesday, Wednesday Nights after Dinner

Course Venue

Lectures, case studies, mentoring sessions will be held at the Nautilus Room, Asilomar Conference Grounds in Pacific Grove, CA.

Address

800 Asilomar Avenue, Pacific Grove, CA 93950

Rooms for the event have been reserved under the names of those attending the course. For specific inquiries pertaining to this, please contact: (888) 635-5310.

Breakfast, Lunch, and Dinner will be held at Crocker Dining Hall located on the Asilomar grounds each day.

In the event that you need additional assistance, please contact Grant Wells, (650) 714-4344.

Faculty Roster

Rajni Agarwal-Hashmi, MD, MBBS
Associate Professor of Pediatrics (Stem Cell Transplantation & Regenerative Medicine); Clinical Director for Pediatric Stem Cell Transplantation, Stanford Children's Health

Crystal Botham, PhD
Director of Research Development in the Department of Pediatrics, Stanford School of Medicine; Director of the Biosciences Grant Writing Academy, Stanford University

Jennifer Swanton Brown, RN
Director of Clinical Research Quality, Stanford School of Medicine Research Office

Molly Bukro
Director of Major Gifts, Lucile Packard Foundation for Children's Health

Cheryl Cathey, PhD
Licensing Associate, Office of Technology Licensing, Stanford University

Jerel Davis, PhD
Managing Director, Versant Ventures

Grace Gengoux, PhD, BCBA-D
Clinical Associate Professor of Psychiatry & Behavioral Sciences (Child & Adolescent Psychiatry), Stanford School of Medicine

Kevin Grimes, MD, MBA
Professor of Chemical & Systems Biology, Stanford School of Medicine; Co-Director of SPARK, Stanford University

Janet Hafler, EdD
Professor of Pediatrics (General Pediatrics), Associate Dean for Educational Scholarship, Director of Teaching and Learning Center, Yale School of Medicine

Shivaani Kummar, MD
Professor of Medicine (Oncology) and of Radiology (Molecular Imaging Program), Stanford School of Medicine; Director of Phase I Oncology Clinical Research Program

Mary Leonard, MD, MSCE
Director of Stanford Maternal & Child Health Research Institute; Professor and Chair of Pediatrics, Stanford School of Medicine; Physician-In-Chief, Lucile Packard Children's Hospital Stanford

Margaret A. Neale, MS, PhD
Professor of Management, Stanford Graduate School of Business; Director of the Managing Teams for Innovation and Success Executive Program; Director of the Influence and Negotiation Strategies Executive Program

Anthony Oro, MD, PhD
Co-Director of Stanford Maternal & Child Health Research Institute; Professor of Dermatology, Stanford School of Medicine; Co-Director of Stanford Center for Definitive and Curative Medicine

Thomas Robinson, MD, MPH
Professor of Pediatrics (General Pediatrics) and of Medicine (Stanford Prevention Research Center), Stanford School of Medicine

Maria Grazia Roncarolo, MD
Professor of Pediatrics (Stem Cell Transplantation) and of Medicine (Blood & Marrow Transplantation), Stanford School of Medicine; Director of Stanford Center for Definitive and Curative Medicine; Co-Director of Institute for Stem Cell Biology and Regenerative Medicine, Stanford School of Medicine

Vicki Seyfert-Margolis, PhD
Board Chariman, Eureka Institute; Founder and CEO, My Own Med, Inc.

Manpreet Singh, MD, MS
Associate Professor of Psychiatry and Behavioral Sciences (Child & Adolescent Psychiatry), Stanford School of Medicine; Director of the Pediatric Mood Disorders Program

Michael Snyder, PhD
Stanford W. Ascherman Professor and Chair, Department of Genetics, Stanford School of Medicine; Director, Center for Genomics and Personalized Medicine

James Wall, MD, MS
Associate Professor of Surgery (Pediatric Surgery), Stanford School of Medicine; Director, Program Development, Biodesign Innovation Fellowship, Stanford Byers Center for Biodesign; Director, UCSF-Stanford Pediatric Device Consortium

Stanford MCHRI Eureka Institute

Ambassadors

Crystal Botham, PhD
Director of Research Development in the Department of Pediatrics, Stanford School of Medicine; Director of the Biosciences Grant Writing Academy, Stanford University

Julie Ledford, PhD
Assistant Professor of Clinical Translational Sciences; Associate Professor of BIO5 Institute, of Cellular and Molecular Medicine, of Immunobiology, and of Medicine, Department of Medicine, University of Arizona College of Medicine

Course Support

Mary Chen, MS, MBA
Assistant Dean of Maternal and Child Health Research; Executive Director of the Stanford Child Health Research Institute

Tamar Green, MD
Assistant Professor of Psychiatry and Behavioral Sciences (Center for Interdisciplinary Brain Sciences), Stanford School of Medicine

Mingxia Gu, MD, PhD
Instructor of Pediatrics (Cardiology), Stanford School of Medicine

David Hong, MD
Assistant Professor of Psychiatry and Behavioral Sciences (Center for Interdisciplinary Brain Sciences), Stanford School of Medicine

Marko Jakovljevic, PhD
Postdoctoral Research Fellow in the Department of Radiology, Stanford School of Medicine

Melissa Mavers, MD, PhD
Instructor of Pediatrics (Stem Cell Transplantation & Regenerative Medicine), Stanford School of Medicine

Trung Pham, MD, PhD
Instructor of Pediatrics (Infectious Diseases), Stanford School of Medicine

Zachary Sellers, MD, PhD
Instructor of Pediatrics (Gastroenterology), Stanford School of Medicine

Sriram Vaidyanathan, PhD
Postdoctoral Research Fellow in the Department of Pediatrics (Stem Cell Transplantation & Regenerative Medicine), Stanford School of Medicine

Grant Wells, MS
Program Manager, Stanford Maternal & Child Health Research Institute

Thank You, Janet!

The course leadership wishes to thank Janet Hafler for all her dedicated time that she took to design this curriculum with our talented Eureka alumni. This was a momentous effort which occurred over several months and many iterations to adapt the Eureka Institute curriculum for our Stanford audience. We have been so fortunate to partner with her on the creation of this course and learn from her experience.

Janet, we are very grateful for your dedication, encouragement, and leadership. We hope you enjoyed working with us as much as we have enjoyed with you!

Eureka Institute Certificate Course 2020

SCHEDULE

Sunday, February 9

3:00-3:30 PM
Check-in and Group Snack

3:30-4:40 PM
Welcome and Introductions
Speaker: Janet Hafler
Moderators: Anthony Oro, Tamar Green, and David Hong

4:40-5:10 PM
Communication of Course Objectives and Eureka Introduction
Speaker: Maria Grazia Roncarolo

Learning Objectives:
- Define the field of translational medicine
- Analyse the components involved
- Discuss the challenges of translational medicine

5:10-5:15 PM
BREAK

5:15-6:15 PM
From Discovery to Clinical Trial: Mapping the Translational Pathway
Speaker: Maria Grazia Roncarolo
Moderators: Tamar Green and Sriram Vaidyanathan

Learning Objectives:
- Explore the pathway of intellectual property development within an institution
- Discuss the benefits and detriments of technology transfer
- Discuss the options, obligations, and strategies of the investigator

6:15-6:30 PM
BREAK

6:30 PM
Dinner - Informal Q&A with Mary Leonard
Hosts: Tamar Green and David Hong

Monday, February 10

8:00-8:30 AM
Coffee

8:30-9:00 AM
Debriefing and Learning Strategies
Speaker: Janet Hafler
Moderators: Tamar Green and David Hong

9:00-12:00 PM
Building Your Translational Medicine Creativity
Facilitators: Rajni Agarwal-Hashmi, Tamar Green, David Hong, and Thomas Robinson

Learning Objective:
- Design thinking to trigger a creative mindset

12:00-1:00 PM
GROUP LUNCH

1:00-2:00 PM
Negotiate to Get (More of) What You Want
Speaker: Margaret Neale
Moderators: David Hong and Manpreet Singh

Learning Objective:
- Learn about the advances in psychology and behavioral economics to provide new strategies for negotiation

Sunday Social Night

7:30 PM, Nautilus Room

Grab some popcorn and join us for a movie!

2:00-2:15 PM
BREAK

2:15-3:15 PM
How Institutions can Promote and Facilitate Traditional Medicine
Speaker: Mary Leonard
Moderators: David Hong and Manpreet Singh

Learning Objectives:
- Learn how to incorporate the principles of negotiation in the context of one's academic career
- Develop methods and identify resources to ensure that your institution supports your objectives

3:15-3:30 PM
BREAK

3:30-4:00 PM
Introduction to Unfolding Case and Journaling
Speakers: Janet Hafler and Vicki Seyfert-Margolis

4:00-4:15 PM
BREAK

4:15 - 5:30 PM
Unfolding Case - Part I: CARDINALdx
Speaker: Vicki Seyfert-Margolis
Moderators: Mingxia Gu and Sriram Vaidyanathan

Senior Mentors: Janet Hafler, Maria Grazia Roncarolo, Vicki Seyfert-Margolis, and Manpreet Singh

Junior Mentors: Mingxia Gu, Trung Pham, Zachary Sellers, and Sriram Vaidyanathan

**See page 15 for details about Unfolding Case*

5:30-5:45 PM
BREAK

5:45-6:15 PM
Journey of a Translational Scientist
Speaker: Manpreet Singh

Learning Objectives:
- Describe the journey of a translational scientist at Stanford
- Appreciate the patient imperative to challenge us to meet clinical unmet needs
- Identify their own inspiration and challenges in implementing TM concepts

Pre-Session Thought Questions for Participants
1. What inspires you to pursue your field of interest?
2. Identify some challenges that you have encountered along the way

6:15-6:30 PM
BREAK

6:30 PM
Dinner: Informal Q&A - Stanford Perspectives on Drug Development with Kevin Grimes
Moderators: Mingxia Gu and Sriram Vaidyanathan

Monday Social Night

7:30 PM, Nautilus Room

Eat, drink, and be merry over wine and cheese!

Tuesday, February 11

8:00-8:30 AM
Coffee

8:30-9:00 AM
Debriefing and Learning Strategies
Speaker: Janet Hafler
Moderators: Tamar Green and David Hong

9:00-10:15 AM
Unfolding Case - Part II: CARDINALdx
Speaker: Vicki Seyfert-Margolis
Moderators: Mingxia Gu and Sriram Vaidyanathan

Senior Mentors: Janet Hafler, Maria Grazia Roncarolo, Vicki Seyfert-Margolis, and Manpreet Singh

Junior Mentors: Mingxia Gu, Trung Pham, Zachary Sellers, and Sriram Vaidyanathan

10:15-10:30 AM
BREAK

10:30-12:00 PM
Translational Medicine Resources
Small Group Sessions
Speakers: Crystal Botham (Grant Writing), Jennifer Brown (Regulatory), Molly Bukro (Philanthropy), and Cheryl Cathey (IP & Tech Transfer)
Moderators: Marko Jakovljevic and Zachary Sellers

12:00-12:15 PM
Small Group Wrap Up

12:15-13:15 PM
GROUP LUNCH

1:15-12:30 PM
Speed Dating I
Moderators: Marko Jakovljevic and Zachary Sellers

Participants will meet 1:1 with faculty on various topics of interest to participants. Individuals available for meetings will be posted on a sign-up sheet.

**See page 15 for details about Speed Dating*

2:30-2:45
BREAK

2:45-3:30 PM
Stories in Translational Medicine I
Speaker: Maria Grazia Roncarolo
Moderators: Tamar Green and Sriram Vaidyanathan

Learning Objectives:
- Explore how to develop drugs successfully in an academic setting
- Discuss the pro's & cons of partnering with Big Pharma
- Critically think through cases for drugability

3:30-3:45 PM
BREAK

3:45-4:45 PM
Designing an Innovative Clinical Trial I:
Pre-Market Product Development
Speaker: Shivaani Kummar
Moderators: Tamar Green and Sriram Vaidyanathan

Learning Objectives:
- Discuss the principles and steps of drug discovery and development
- Describe the phases of clinical drug development, discussing some of the recent changes
- Discuss some of the design considerations for early phase trials

4:45-5:00 PM
BREAK

5:00-5:15 PM
Introduction to Mentoring
Speaker: Janet Hafler
Moderators: Marko Jakovljevic, Melissa Mavers, and Zachary Sellers

5:15-6:15 PM
Mentoring Session I
Speaker: Janet Hafler
Moderators: Marko Jakovljevic, Melissa Mavers, and Zachary Sellers

Participants will address their own dilemmas in a small group setting as facilitated by expert faculty.

Learning Objectives:
- Discuss effective mentoring
- Explore strategies to facilitate discussion in the groups

**See page 15 for details about Mentoring*

6:15-6:30 PM
BREAK

6:30 PM
Dinner Informal Q&A - Wellness in the Competitive Environment with Grace Gengoux
Moderators: Melissa Mavers and Manpreet Singh

Tuesday Social Night

7:30 PM, Firepit
(Next to volleyball court)

Relax, listen to the waves, and enjoy the bonfire!

Wednesday, February 12

8:00-8:30 AM
Coffee

8:30-9:00 AM
Debriefing and Learning Strategies
Speaker: Janet Hafler
Moderators: Tamar Green and David Hong

9:00-10:15 AM
Unfolding Case - Part III: CARDINALdx
Speaker: Vicki Seyfert-Margolis
Moderators: Mingxia Gu and Sriram Vaidyanathan

Senior Mentors: Janet Hafler, Maria Grazia Roncarolo, Vicki Seyfert-Margolis, and Manpreet Singh

Junior Mentors: Mingxia Gu, Trung Pham, Zachary Sellers, and Sriram Vaidyanathan

10:15-10:30 AM
BREAK

10:30-12:00 PM
Stories in Translational Medicine II
Speaker: Anthony Oro

Learning Objectives:
- Identify the essential elements of process development
- Discuss the difference between academic and process development teams
- Identify how to prepare for an IND submission
- Discuss how to interact effectively with the FDA

12:00-1:00 PM
GROUP LUNCH

1:00-2:15 PM
Speed Dating II
Moderators: Marko Jakovljevic and Zachary Sellers

Participants will meet 1:1 with faculty on various topics of interest to participants. Individuals available for meetings will be posted on a sign-up sheet.

Wednesday, February 12 - Cont'd

2:15-2:30 PM
BREAK

2:30-3:30 PM
Stories in Translational Medicine III
Speaker: Michael Snyder
Moderators: David Hong and Manpreet Singh

Learning Objectives:
- Discuss the when & how to spin out a company in an academic setting
- Explore how to interact effectively with VC's
- Discuss how to protect your research & leverage intellectual property

3:30-3:45 PM
BREAK

3:45-4:45 PM
Designing an Innovative Clinical Trial II: Post-Market Analysis/Real World Evidence
Speaker: Vicki Seyfert-Margolis
Moderators: Tamar Green and Sriram Vaidyanathan

Learning Objectives:
- 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
- Discuss new models of approval that incorporate more real world post-market research into an evolving approval process

4:45-5:00 PM
BREAK

5:00-6:00 PM
Leveraging Venture Capital as a Physician Scientist
Speaker: Jerel Davis
Moderators: David Hong and Manpreet Singh

Learning Objectives:
- Explore alternative career paths for MDs and PhDs
- VC 101: Discuss the basics of venture capital
- Learn how venture capitalists decide what new companies to build or back

6:15 PM
Dinner Informal Q&A - Informal Q&A
Stanford Perspectives on Devices with James Wall
Moderators: Tamar Green and David Hong

Thursday, February 13

8:00-8:30 AM
Coffee

8:30-9:00 AM
Debriefing and Learning Strategies
Speaker: Janet Hafler
Moderators: Tamar Green and David Hong

9:00-10:15 AM
Mentoring Session II
Speaker: Janet Hafler
Moderators: Marko Jakovljevic, Melissa Mavers, and Zachary Sellers

Participants will continue to address their own dilemmas in a small group setting as facilitated by expert faculty.

10:00 - 10:15 AM
BREAK

10:30 -11:00 AM
Closing Reflection
Speakers: Janet Hafler, Mary Leonard, and Maria Grazia Roncarolo

11:00 -12:00 PM
GROUP LUNCH

DEPARTURE

Eureka Dynamic Sessions

A significant element of the program is going to involve YOU talking, either one-to-one or in small groups. The aim of all these sessions is to help you to learn from each other and the faculty directly, and to focus on those parts of translation medicine, and a career in translational medicine, that matter most to you.

For some sessions, you will be allocated to a specific group (Unfolding Case Study; Mentoring); for the others, you will choose who you want to meet and/or which topic you want to discuss (Speed Dating).

Unfolding Case Study: CARDINALdx

This case examines how to effectively develop a diagnostic tool while leveraging the resources & expertise at Stanford. You will work in depth with the case in a pre-allocated small-group setting over three separate sessions.

Through this case, you'll grapple with the development of the technology based on a clinical use case, explore how intellectual property plays a role in product development and analyze the associated regulatory requirements. You will also discuss and determine research and business strategies necessary to "translate" the product & formulate a potential company. Parallel concepts of collaboration and team will also be explored.

Mentoring

You will each present a dilemma you are currently facing to a small group of peers. You will be allocated to a group, which will be mentored by a faculty member. Your 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.

As some of you already know, work with or have worked with some of the faculty members, every effort will be made to ensure you have "neutral" tutors guiding the sessions. In addition, unless otherwise specified and agreed to by the group, discussions in the mentoring session are treated as confidential.

You will have your first session on Tuesday and the second session on Thursday.

Speed Dating

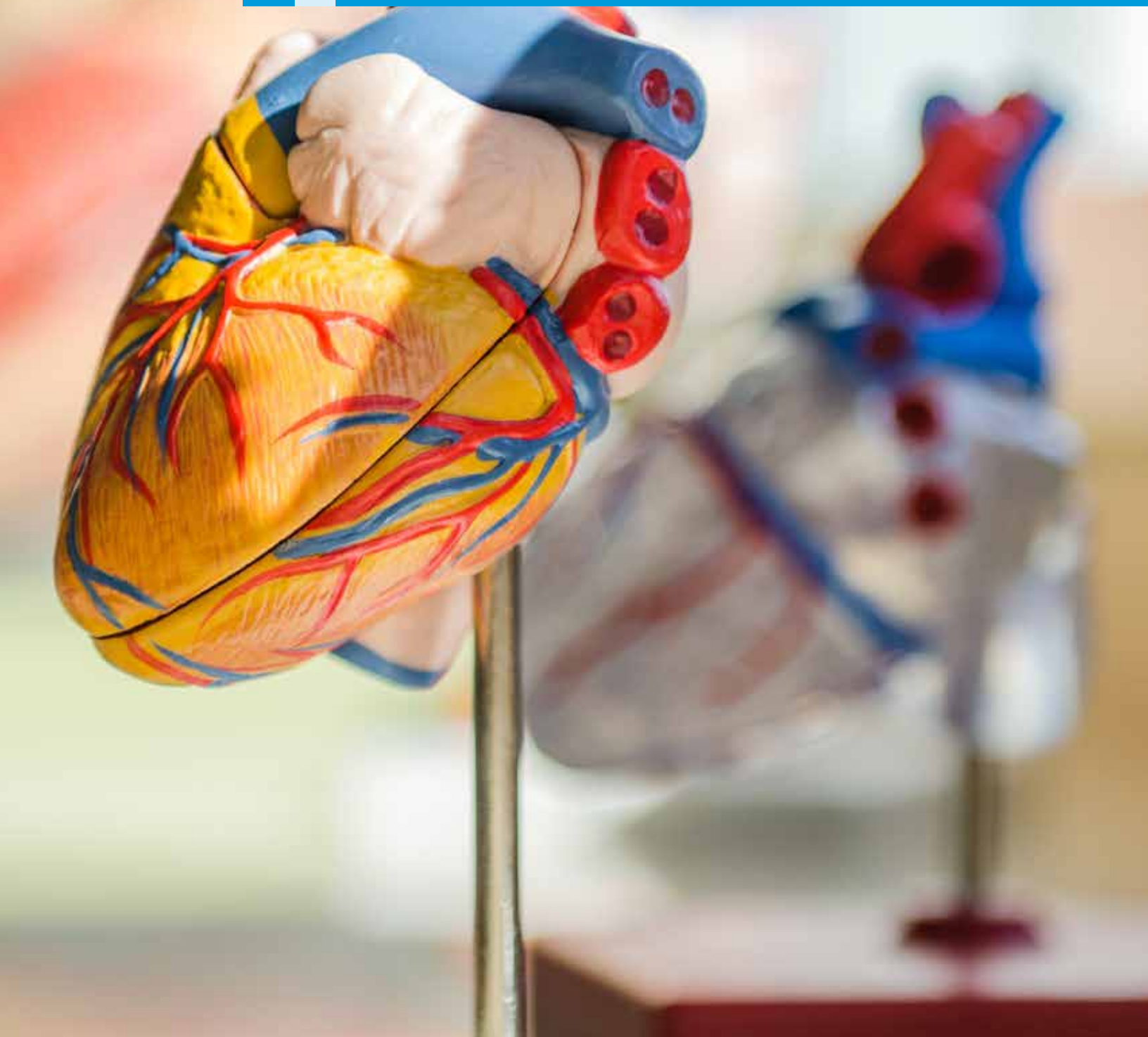
"Speed Dating" provides the opportunity for you to have a series of one-on-one discussions with individual faculty for 10 minutes each. Who you talk with and on what topics are your choices!

Please consult the faculty biographies at the end of this booklet prior to completing the signup sheet, which will be prominently displayed and made available from Sunday.

There will be two sessions on Tuesday and Wednesday.

Eureka Institute Certificate Course 2020

FACULTY BIOGRAPHIES



Rajni Agarwal-Hashmi, MD, MBBS

Associate Professor of Pediatrics (Stem Cell Transplantation & Regenerative Medicine)Clinical Director for Pediatric Stem Cell Transplantation, Stanford Children's Health

Dr. Agarwal is Associate Professor of pediatrics, section chief and clinical director for the division of Pediatric Stem Cell Transplantation and Regenerative Medicine.

Dr. Agarwal trained extensively in India as a pediatric hematologist-oncologist. Due to a strong interest in pursuing translational research in the field she chose to come to the USA and Joined Cincinnati Children's Hospital Medical Center (CHMC) in Ohio. She received extensive training and expertise in stem cell biology at the hospital for sick children Toronto, Canada and National institutes of health (NIH) in Bethesda, MD. At the hospital for sick children, she learned and developed stem cell assays and invivo models of human hematopoiesis that were critical in understanding of stem cell biology and its clinical applications. At the NIH she spent two years and developed gene transfer assays in Hematopoietic cells. At the NIH, she also worked on developing the mammalian models for in vivo gene transfer in hematopoietic cells. During this time her work was published on chronic myeloid leukemia addressing the role of interaction of stromal cells with hematopoietic cells in the bone marrow. This publication defined conditions to favor the growth of benign hematopoietic cells in patients with chronic myeloid leukemia.

At CHMC, Cincinnati, she established the stem cell biology laboratory to further investigate the field of Hematopoietic stem cells focusing on the umbilical cord blood. She started the clinical Umbilical cord blood transplant program at CHMC. In the laboratory she was able to set up the assays to identify and collect highly purified hematopoietic cells from the cord blood. The engraftment and expansion potential of the cord blood derived hematopoietic cells was studied in the immune deficient mice. These models were then used to develop assays for gene transfer in Fanconi Anemia stem cells.

She has been at Stanford for the past 18 years and currently serves as the Medical Director of the Stem Cell Transplant and Regenerative Medicine program. Most of her work is focused on two projects 1) developing antibody based conditioning for patient's undergoing stem cell transplantation. Antibody based conditioning is a breakthrough in the field and has the promise to reduce regimen related toxicity and 2) clinical trial using Tr1, regulatory T cell therapy to induce tolerance and reduce the risk of GVHD.

Crystal Botham, PhD

Director of Research Development in the Department of Pediatrics, Stanford School of Medicine; Director of the Biosciences Grant Writing Academy, Stanford University

Crystal Botham, Ph.D. is Director of Research Development in the Department of Pediatrics at Stanford University. Dr. Botham provides strategic advice to faculty and others to enable competitive funding applications and productive research programs.

Dr. Botham is also the Director of the Biosciences Grant Writing Academy (https://grantwriting.stanford.edu). The Grant Writing Academy supports graduate and postdoctoral trainees in developing and articulating research strategies to tackle important scientific questions.

Jennifer Swanton Brown, RN, CCRP

Director of Clinical Research Quality, Stanford School of Medicine Research Office

Jennifer Swanton Brown, RN, CCRP, has been with Stanford University since 2006, when she joined the IRB as Training Specialist. Jennifer joined the School of Medicine in 2008 as Manager of Regulatory Services and Education for Spectrum. She became the Director of the Clinical Research Quality office at its inception in March 2016, responsible to the Senior Associate Dean for Research. She has 30 years of experience in nursing, writing, training and education, and regulatory affairs, with emphasis in quality improvement and clinical trials. Her education is in Linguistics and Nursing, and she received her Master of in Liberal Arts from Stanford in 2013. Her clinical nursing experience included bone marrow transplant at UCSF, home care and hospice. After clinical nursing, Jennifer worked in the medical device industry for 10 years (Natus Medical) where she worked as a clinical specialist, technical writer, sales trainer, and ultimately Regulatory Affairs Manager.

Molly Bukro

Director of Major Gifts, Lucile Packard Foundation for Children's Health

Molly Bukro is a seasoned development professional currently serving as Director of Major Gifts with Lucile Packard Foundation for Children's Health, the dedicated fundraising entity for Lucile Packard Children's Hospital Stanford, and the child and maternal health programs at Stanford University School of Medicine.

With more than 16 years of experience in development including 12 in pediatric medicine at an academic medical center, she has a proven track record of establishing and maintaining trusted relationships with major and principal gift donors, volunteers, and leadership, in addition to soliciting and closing seven figure gift commitments.

Cheryl Cathey, PhD

Licensing Associate, Office of Technology Licensing, Stanford University

Cheryl Cathey, Ph.D., joined the Office of Technology Licensing at Stanford in 2019. Prior to her current position, she spent much of her career as an executive and entrepreneur in the medical diagnostic and life science industries. She has extensive experience in business development, technical leadership, company formation, and product development. She's worked at a variety of companies including Applied Biosystems, Caliper Life Sciences, Igen, and numerous startups, and was a co-founder and COO of a molecular diagnostic company focused on point-of-care pathogen detection. Cheryl earned a B.S. in Chemical Engineering from the University of Colorado, Boulder and M.S. and Ph.D. degrees in Chemical Engineering from Stanford.

Jerel Davis, PhD

Managing Director, Versant Ventures

Jerel Davis, Ph.D., is a Managing Director based in Vancouver, Canada. Since joining Versant in 2011, he has been involved in launching and investing in a number of Versant's portfolio companies including Quanticel (sale), Novira (sale), Crispr (2016 IPO), Inception 4 (sale), Inception 5 (sale), Northern, Turnstone, BlueRock (sale), Repare, VenatoRx and Akero (2019 IPO). He has led Versant's execution of creative corporate transactions with multiple pharmaceutical partners including Celgene, Roche and Bayer, and was instrumental in establishing Versant's presence in Canada, including the creation of our company-building infrastructure in Vancouver, Toronto and Montreal. Jerel was promoted to Managing Director at Versant in 2015.

Prior to joining Versant, Jerel was an Associate Principal at McKinsey and Company where he advised healthcare corporations in pharmaceuticals, biotechnology, medical device and molecular diagnostics. He has worked in a number of healthcare markets globally including the U.S., Canada, Europe, China, Russia and India. Jerel was a post-doctoral fellow at Stanford University, where he also completed his Ph.D., and trained at Amgen as a researcher.

Grace Gengoux, PhD, BCBA-D

Clinical Associate Professor of Psychiatry and Behavioral Sciences (Child & Adolescent Psychiatry), Stanford School of Medicine

Grace Gengoux, Ph.D., BCBA-D, is a Clinical Associate Professor, Director of the Autism Intervention Clinic, and Well-being Director for the Department of Psychiatry and Behavioral Sciences at Stanford University. Dr. Gengoux is a licensed clinical psychologist with expertise in naturalistic developmental behavioral intervention for children with Autism Spectrum Disorder. Dr. Gengoux received her Ph.D. in Clinical Psychology from the University of California Santa Barbara and completed her clinical internship and postdoctoral fellowship at the Yale Child Study Center, before joining the Stanford University School of Medicine clinical faculty in 2010. She has specialized training in Pivotal Response Treatment (PRT) and has completed multiple clinical trials evaluating the effects of PRT on the social-communication competence of young children with autism. Along with her collaborators at Stanford, Dr. Gengoux has published peer-reviewed journal articles and book chapters on treatments for autism and regularly presents her research at professional conferences and community events. Dr. Gengoux serves as Associate Editor for the Journal of Positive Behavior Interventions and serves on the Board of Directors for Gatepath, the largest non-profit serving individuals with developmental disabilities in San Mateo and Santa Clara Counties. In her work as Department Well-being Director, Dr. Gengoux leads a taskforce charged with developing solutions to combat burnout by improving efficiency of practice and cultivating a stronger culture of wellness in the Department of Psychiatry. Dr. Gengoux is particularly passionate about improving professional fulfillment for early career faculty and implementing system-level interventions to support staff, faculty, and trainees to make meaningful contributions in their chosen field.

Kevin Grimes, MD, MBA

Professor of Chemical & Systems Biology, Stanford School of Medicine; Co-Director of SPARK, Stanford University

Kevin Grimes is a Professor of Chemical and Systems Biology and the Co-director of the SPARK Program in Translational Research at the Stanford University School of Medicine. He began his career as a Clinical Assistant Professor of Medicine at Stanford, where his primary duties included the teaching and practice of internal medicine. Grimes received a Hartford Foundation Fellowship to study health economics and obtained an MBA at the Stanford Graduate School of Business. He was subsequently selected as a White House Fellow and assigned to the Department of Defense, where he served as Special Assistant to the Secretary. He spent fifteen years in industry, working in the medical device, life science consulting, and biotechnology sectors prior to returning to Stanford to co-direct SPARK. SPARK's three-fold mission is to advance promising research discoveries into the clinic as new therapeutics and diagnostics; to educate faculty, post-doctoral fellows and students regarding the translational process; and to identify and promote more efficient approaches to bring new therapies to patients. Over 50% of projects completing SPARK have been licensed and/or advanced to clinical trials. The SPARK methodology has been adopted by over 50 academic institutions throughout the world in a SPARK Global network that facilitates collaborative translational research on important medical issues. Grimes also teaches graduate student courses on drug discovery and development and continues to teach and practice internal medicine. He has received the David Rytand Award for Excellence in Clinical Teaching and the Faculty Award for Excellence in Graduate Teaching. clinical journals. She has served as visiting professor internationally and has been invited to present regularly at regional and national professional meetings.

Janet Hafler, EdD

Professor of Pediatrics (General Pediatrics), Associate Dean for Educational Scholarship, Director of Teaching and Learning Center, Yale School of Medicine

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

Shivaani Kummar, MD

Professor of Medicine (Oncology) and of Radiology (Molecular Imaging Program), Stanford School of Medicine; Director of the Phase I Oncology Clinical Research Program

Dr. Kummar's research interests focus on developing novel therapies for cancer. She specializes in conducting pharmacokinetic and pharmacodynamic driven first-in-human trials tailored to make early, informed decisions regarding the suitability of novel molecular agents for further clinical investigation. Her studies integrate genomics and laboratory correlates into early phase trials. She is interested in alternate trial designs to facilitate rational drug selection based on human data and help expedite drug development timelines. She has published numerous articles in medical journals and serves on a number of national and international scientific committees.

Mary Leonard, MD, MSCE

Director of Stanford Maternal & Child Health Research Institute; Professor and Chair of Pediatrics, Stanford School of Medicine; Physician-In-Chief, Lucile Packard Children's Hospital Stanford

Mary Leonard, MD, MSCE, is the Arline and Pete Harman Professor and Chair of the Department of Pediatrics at Stanford University School of Medicine and the Adalyn Jay Physician in Chief at Lucile Packard Children's Hospital Stanford. She assumed these positions on July 1, 2016.

Energetic and collaborative, Dr. Leonard is a compassionate clinician and researcher who cares deeply about improving the health and well-being of children everywhere. A graduate of the Stanford University School of Medicine, Mary returned to Stanford Medicine in 2014 after spending 25 years at the Children's Hospital of Philadelphia and the University of Pennsylvania. At Stanford, her multi-disciplinary research program is focused on the impact of chronic diseases on bone metabolism and nutrition across the life span. Mary directs the innovative and trans-disciplinary child and maternal health research and training initiatives of the Stanford Child Health Research Institute.

Mary is a distinguished investigator, an expert clinician, and a respected mentor who embodies the academic and integrated mission of Stanford Medicine. A member of the Precision Health Committee, she is committed to Stanford Medicine's vision of proactive and personalized health care and has been at the forefront of efforts to integrate Precision Health approaches and skills into our training programs.

Margaret A. Neale, MS, PhD

Professor of Management, Stanford Graduate School of Business; Director of the Managing Teams for Innovation and Success Executive Program; Director of the Influence and Negotiation Strategies Executive Program

Margaret A. Neale is the Adams Distinguished Professor of Management, Emerita. She was the Graduate School of Business John G. McCoy-Banc One Corporation Professor of Organizations and Dispute Resolution from 2000-2012. Trust Faculty Fellow in 2011-2012 and in 2000-2001. From 1997-2000, she was the Academic Associate Dean of the Graduate School of Business at Stanford University. Prior to joining Stanford's faculty in 1995, she was the J.L. and Helen Kellogg Distinguished Professor of Dispute Resolution and Organizations at the J.L. Kellogg Graduate School of Management at Northwestern University. She received her Bachelor's degree in Pharmacy from Northeast Louisiana University, her Master's degrees from the Medical College of Virginia and Virginia Commonwealth University and her PhD in Business Administration from the University of Texas. She began her academic career as a member of the faculty at the Eller School of Management of the University of Arizona.

Professor Neale's major research interests include bargaining and negotiation, distributed work groups, and team composition, learning, and performance. She is the author of over 70 articles on these topics and is a coauthor of three books: Organizational Behavior: A Management Challenge (third edition) (with L. Stroh and G. Northcraft) (Erlbaum Press, 2002); Cognition and Rationality in Negotiation (with M.H. Bazerman) (Free Press, 1991); Negotiating Rationally (with M.H. Bazerman) (Free Press, 1992); and one research series Research on Managing in Groups and Teams (with Elizabeth Mannix) (Emerald Press). She is or has served on the editorial boards of the Administrative Science Quarterly, Journal of Applied Psychology, Organizational Behavior and Human Decision Processes, International Journal of Conflict Management, and Human Resource Management Review.

In addition to her teaching and research activities, Professor Neale has conducted executive seminars and management development programs in the United States, United Kingdom, Australia, Holland, Switzerland, Brazil, Thailand, France, Canada, Nicaragua, the People's Republic of China, Hong Kong, United Arab Emirates, Mexico, Israel, and Jamaica for public agencies, city governments, health care and trade associations, universities, small businesses and Fortune 500 corporations in the area of negotiation skills, managerial decision making, managing teams, and workforce diversity. She is the faculty director of three executive programs at Stanford University: Influence and Negotiation Strategies, Managing Teams for Innovation and Success, and the Executive Program for Women Leaders.

Anthony Oro, MD, PhD

Co-Director of Stanford Maternal & Child Health Research Institute; Professor of Dermatology, Stanford School of Medicine; Co-Director of Stanford Center for Definitive and Curative Medicine

Anthony E. Oro, M.D., Ph.D., is the Eugene and Gloria Bauer Professor of Dermatology, Associate Director of the Center for Definitive and Curative Medicine, and the co-director of the Child Health Research Institute. He is co-founder of the Program in Epithelial Biology, and an active member of the Institute for Stem Cell Biology and Regenerative Medicine, Children's Health Research Institute, Bio-X, and the Program in Cancer Biology. His research interests encompass cancer genomics and tumor evolution, stem cell biology and hair/skin development and regeneration, and definitive molecular and cellular therapeutics. His clinical interests include hair biology, non-melanoma skin cancer, and stem cell-based therapies for genetic skin diseases.

Thomas Robinson, MD, MPH

Professor of Pediatrics (General Pediatrics) and of Medicine (Stanford Prevention Research Center), Stanford School of Medicine

Thomas Robinson, MD, MPH, is the Irving Schulman, MD Endowed Professor of Child Health and Professor of Pediatrics and of Medicine at Stanford University School of Medicine.

Dr. Robinson designs solutions to improve health and well-being of children, families, and the planet. Dr. Robinson originated the solution-oriented research paradigm and directs the Stanford Solutions Science Lab. He is known for his pioneering obesity prevention and treatment research, including the concept of stealth interventions. His research applies social cognitive models of behavior change to behavioral, social, environmental and policy interventions for children and families in real world settings, making the results relevant for informing clinical and public health practice and policy. His research is largely experimental, conducting rigorous school-, family- and community-based randomized controlled trials. He studies obesity and disordered eating, nutrition, physical activity/inactivity and sedentary behavior, the effects of television and other screen time, adolescent smoking, aggressive behavior, consumerism, and behaviors to promote environmental sustainability. He is published widely in the scientific literature and a frequent appointee to expert and advisory panels for leading national and international scientific and public health agencies and organizations. Dr. Robinson also teaches undergraduate and graduate students at Stanford, and practices Pediatrics at Lucile Packard Children's Hospital. He received his B.S. and M.D. from Stanford University and his M.P.H. from the University of California, Berkeley. He trained in Pediatrics at Children's Hospital, Boston and Harvard Medical School.

Maria Grazia Roncarolo, MD

Professor of Pediatrics (Stem Cell Transplantation) and of Medicine (Blood & Marrow Transplantation), Stanford School of Medicine; Director of Stanford Center for Definitive and Curative Medicine; Co-Director of Institute for Stem Cell Biology and Regenerative Medicine, Stanford School of Medicine

Maria Grazia Roncarolo, MD is the George D. Smith Professor in Stem Cell and Regenerative Medicine, Professor of Pediatrics and of Medicine, Director of the Center for Definitive and Curative Medicine, and Co-Director of the Institute for Stem Cell Biology and Regenerative Medicine.

Dr. Roncarolo leads efforts to translate scientific discoveries in genetic diseases and regenerative medicine into novel patient therapies, including treatments based on stem cells and gene therapy.

A pediatric immunologist by training, she earned her medical degree at the University of Turin, Italy. She spent her early career in Lyon, France, where she focused on severe inherited metabolic and immune diseases, including severe combined immunodeficiency (SCID), better known as the "bubble boy disease." Dr. Roncarolo was a key member of the team that carried out the first stem cell transplants given before birth to treat these genetic diseases.

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

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

Dr. Roncarolo developed new gene-therapy approaches, which she pursued as director of the Telethon Institute for Cell and Gene Therapy at the San Raffaele Scientific Institute in Milan. She was the principal investigator leading the successful gene therapy trial for SCID patients who lack an enzyme critical to DNA synthesis, which is a severe life-threatening disorder. Based on the results of this trial, gene therapy for ADA-SCID has obtained Orphan drug status from both the FDA and EMEA and it was licensed to Glaxo Smith Klein, which has received European Commission approval to market under the name of Strimvelis. Under her direction, the San Raffaele Scientific Institute has been seminal in showing the efficacy of gene therapy for otherwise untreatable inherited metabolic diseases and primary immunodeficiencies.

Dr. Roncarolo established the Stanford Center for Definitive and Curative Medicine to cure patients with currently incurable diseases through the development of innovative stem cell-and gene-based therapies.

Vicki Seyfert-Margolis, PhD

Board Chairman, Eureka Institute; Founder and CEO, My Own Med, Inc.

Vicki Seyfert-Margolis, PhD is the founder and CEO of My Own Med, Inc., a company specializing in using digital technologies to support real world evidence clinical research. 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. Vicki also serves on Board of Directors for the EveryLife Foundation for Rare Diseases, and Eureka Institute for Translational Medicine.

Manpreet Singh, MD, MS

Associate Professor of Psychiatry and Behavioral Sciences (Child & Adolescent Psychiatry), Stanford School of Medicine; Director of the Pediatric Mood Disorders Program

Dr. Singh is Associate Professor of Psychiatry and Behavioral Sciences, and Director of the Pediatric Mood Disorders Program in the Division of Child and Adolescent Psychiatry at Stanford. Her time is divided among the clinical, research, and teaching missions of department. She directs Stanford's Pediatric Mood Disorders Program, which is an integrated multidisciplinary clinic that aims to treat youth with a spectrum of mood disorders along a developmental continuum. She leads a team of child and adolescent psychiatrists, psychologists, child and adolescent psychiatry fellows, clinical and research postdoctoral fellows, residents, medical students, and research coordinators. Her research focuses on investigating the origins and pathways for developing mood disorders during childhood, as well as methods to protect and preserve function before and after the onset of early mood problems.

Dr. Singh's research team (Pediatric Emotion And Resilience Lab) conducts innovative research examining the neural, cognitive, and genetic underpinnings of pediatric mood disorders. She has extensive experience with multi-level investigations involving children and families, as well as clinical, neuroimaging, and dimensionally-based behavioral assessments. She completed her NIMH career development award that characterizes emotion regulation in healthy offspring of parents with bipolar disorder, and has been leading three independent NIMH funded studies examining the mechanisms of mood and other psychiatric disorders and their treatments among youth. She is extensively involved in collaborations aimed to investigate methods of treating problems associated with and leading up to mood disorders in youth. Specifically, she is examining the benefits of family focused psychotherapy, mindfulness meditation, and medications in youth with or at risk for mood disorders to reduce mood symptoms and family stress. She has also been reviewing the neural effects of medication and psychotherapy in youth. These areas of research hold considerable promise to impact our understanding of the core mechanisms and early interventions for pediatric onset mood disorders.

Michael Snyder, PhD

Stanford W. Ascherman Professor and Chair, Department of Genetics, Stanford School of Medicine; Director, Center for Genomics and Personalized Medicine

Michael Snyder, PhD, is the Stanford W. Ascherman Professor and Chair in the Department of Genetics, and Director of the Center for Genomics and Personalized Medicine at Stanford University.

Dr. Snyder received his Ph.D. training at the California Institute of Technology and carried out postdoctoral training at Stanford University. He is a leader in the field of functional genomics and proteomics, and one of the major participants of the ENCODE project.

His laboratory study was the first to perform a large-scale functional genomics project in any organism, and has developed many technologies in genomics and proteomics. These including the development of proteome chips, high resolution tiling arrays for the entire human genome, methods for global mapping of transcription factor binding sites (ChIP-chip now replaced by ChIP-seq), paired end sequencing for mapping of structural variation in eukaryotes, de novo genome sequencing of genomes using high throughput technologies and RNA-Seq. These technologies have been used for characterizing genomes, proteomes and regulatory networks.

Seminal findings from the Snyder laboratory include the discovery that much more of the human genome is transcribed and contains regulatory information than was previously appreciated, and a high diversity of transcription factor binding occurs both between and within species.

He has also combined different state-of-the-art “omics” technologies to perform the first longitudinal detailed integrative personal omics profile (iPOP) of person and used this to assess disease risk and monitor disease states for personalized medicine. Snyder is a cofounder of several biotechnology companies, including Protometrix (now part of Life Tehcnologies), Affomix (now part of Illumina), Excelix, Personalis and founder of Qbio, and he presently serves on the board of a number of companies.

James Wall, MD, MS

Associate Professor of Surgery (Pediatric Surgery), Stanford School of Medicine; Director, Program Development, Biodesign Innovation Fellowship, Stanford Byers Center for Biodesign; Director, UCSF-Stanford Pediatric Device Consortium

Dr. James Wall is a pediatric surgeon who focuses on minimally-invasive approaches to children's surgery. He is an alumnus of the Stanford Biodesign Innovation Fellowship. His research focuses on how to educate others to design and develop health technology, as well as on flexible endoscopic surgery in children. He has developed multiple health technologies including a novel epidural needle, a protection device for umbilical catheters, and a wearable leg compression system. James currently holds the roles of director of Program Development for the Stanford Biodesign Innovation Fellowship, chairman of the perioperative value analysis committee for Lucile Packard Children's Hospital, and co-director of the UCSF-Stanford Pediatric Device Consortium. James graduated from Tulane University with an undergraduate degree in biomedical engineering and has a masters in bioengineering from Stanford. He attended the University of Pennsylvania School of Medicine and completed a general surgery residency training program at the University of California, San Francisco. He completed a fellowship in minimally invasive surgery at the IRCAD institute in France followed by a Pediatric Surgery fellowship at Stanford.

Eureka Institute Certificate Course 2020

AMBASSADOR BIOGRAPHIES

Crystal Botham, PhD

Director of Research Development in the Department of Pediatrics, Stanford School of Medicine; Director of the Biosciences Grant Writing Academy, Stanford University

Crystal Botham, Ph.D. is Director of Research Development in the Department of Pediatrics at Stanford University. Dr. Botham provides strategic advice to faculty and others to enable competitive funding applications and productive research programs.

Dr. Botham is also the Director of the Biosciences Grant Writing Academy (https://grantwriting.stanford.edu). The Grant Writing Academy supports graduate and postdoctoral trainees in developing and articulating research strategies to tackle important scientific questions.

Julie Ledford, PhD

Assistant Professor of Clinical Translational Sciences; Associate Professor of BIO5 Institute, of Cellular and Molecular Medicine, of Immunobiology, and of Medicine, Department of Medicine, University of Arizona College of Medicine

Dr. Julie Ledford received her PhD from the University of North Carolina at Chapel Hill. Her lab is focused on determining mechanisms by which endogenous lung proteins mediate various states of lung inflammation, pathogen infection and lung disease progression using a translational research approach between human samples and mouse models. Studies are currently focused around the action of two proteins, surfactant protein-A and club cell secretory protein-16. Based on mechanistic studies of these two endogenous proteins, another aspect of the lab has moved into drug development and testing in pre-clinical animal models. Her research lab is funded by the NIH with 2-R01s and an R21.