



**EUREKA INSTITUTE™**  
for translational medicine

**nature  
medicine**

# 2<sup>nd</sup> Annual International Certificate Program in Translational Medicine

Siracusa, Italy • May 16 - May 22, 2010

[www.eurekainstitute.org](http://www.eurekainstitute.org)  
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## Translational Medicine

Translational medicine (TM), as defined here, encompasses the continuum from identifying an idea to development into new therapies for human diseases. The field includes molecular medicine, development and protection of intellectual property, knowledge of funding sources and regulatory agencies, and design of preclinical and clinical trial design studies.

## Area of Need

Three major obstacles adversely affect translating therapeutic strategies from 'benchside' discovery to 'bedside' use:

- ❶ the challenge of translating basic science into clinical studies;
- ❷ the task of translating clinical studies into therapies; and
- ❸ the lack of a single program for collaborative training of scientists, physicians and industry leaders.

Limited training exists to attend to these challenges at a national level; at an international level this type of education is nonexistent. The certificate program addresses these needs by helping to develop a professional capable of acting as an interface among the various components of TM.

## Mission

The Institute's mission is two-fold: to enhance professionals' knowledge in translational medicine; and promote critical thinking across the professions for physicians, scientists, and business professionals.

The program will prepare international leaders in translational medicine to facilitate the evolution from lead identification

to proof of concept in humans. Drawing upon the expertise of internationally recognized experts in research, education, and institutional management, educational content is aimed at fostering innovative teams, critical thinking and personal mentoring. The ultimate goal of this endeavor is to produce multidimensional, interdisciplinary leaders who are prepared for a wide range of careers focusing on improving human health.

## The Three Pillars of the Educational Initiative

- ❶ Attitude of teamwork
- ❷ Skills of critical thinking
- ❸ Knowledge of translational medicine

## International Certificate Program

In May of 2008, the Eureka Institute gathered leaders in translational medicine research, educators, and institutional administrators and conducted a Consensus Conference to explore how to address the education of new professionals in TM. This resulted in an innovative educational initiative to train mid-level career professionals to address critical gaps in the field. The Institute conducted its inaugural Certificate Program in May of 2009. Course evaluations from participants ranged from excellent to outstanding.

**We thank the following for their kind support of the 2009 Certificate Program:** Nature Medicine, the University of Arizona, University Medical Center Utrecht, the Dutch Arthritis Association, Roche International, and GlaxoKlineSmith R&D, China.

**"I personally felt that the program was a tremendous experience for all involved and I think the faculty put in a terrific effort to make it a success."**

**- Mario Ehlers,**  
*Deputy Director, Clinical Trials Group,  
Immune Tolerance Network*





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This innovative international program will provide the opportunity for participants to experience a variety of novel teaching and learning strategies. Learner-centered discussions will be integral to the curriculum and all participants will be mentored by industry leaders and international faculty. A flexible program design will be tailored to individual needs.

The intensive 7-day program will include case discussions that address key topics and challenges in translational medicine, such as: discovery from basic science (including target validation), securing intellectual property, identifying and validating a translational strategy, preclinical activities (toxicity studies, CMC, IND preparation), clinical trial designs (bioethics, biostatistics, regulatory), and fundraising.

Case studies will be used to facilitate discussion and develop creative problem solving strategies to address the challenges facing drug development today. Participants will have the opportunity to develop novel skills to build new kinds of teams to catalyze the development of drugs.

Hands-on opportunities to hone communication skills will be provided. Through mentorships and elective internships, participants will be able to address their own specific goals.

Participants will receive a certificate of completion of the course.

### Anticipated Impact

The World Health Organization Constitution states that: "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being." Through education and a global network of interdisciplinary experts, we will begin to train new professionals in translational medicine — professionals who can contribute to improving the health care of many people. The interdisciplinary approach of the Institute will encourage dialogue among business, science, and regulatory/legal fields. The Eureka Institute's mission has social, scientific and financial significance.

### Support for the Initiative

The Eureka Institute is a not-for-profit organization both in the European Union and the United States. Eureka is currently seeking funding to support this innovative educational initiative. Phase 1 is defined as the Inaugural Certificate Program. Phase 2 involves developing an accredited degree program with participating institutions.

By enabling people to lead research through the spectrum of translational medicine (discovery to phase II clinical trials), we can begin to move critical scientific insights into tangible benefits for patients. The Eureka Institute has a particular interest in pediatric, autoimmune and orphan diseases, especially in disadvantaged and underprivileged communities worldwide.

### Opportunities for Support

Additional funding support is required. Sponsors could participate in a variety of ways that fit their missions, such as sponsoring candidates in the Certificate Program or funding specific aspects of the initiative development (curriculum, case writing, infrastructure, technology platforms, or web-based learning systems). Please contact us for more details.

**Contact Info:**  
**[www.Eurekainstitute.org](http://www.Eurekainstitute.org)**  
**[info@Eurekainstitute.org](mailto:info@Eurekainstitute.org)**

### 2009 Faculty Roster

**Salvatore Albani, M.D., Ph.D.**, Professor of Medicine and Pediatrics, the Charles A.L. and Suzanne M. Stephens Chair of Rheumatology Research and Director, Arizona Arthritis Center, The University of Arizona

**Dirk Elewaut, M.D.**, University Hospital, Department of Rheumatology, Laboratory of Molecular Immunology and Inflammation, University of Gent

**Wainwright Fishburn, J.D.**, Partner, Cooley Godward Kronish LLP

**Carol Gregorio, Ph.D.**, Professor of Cell Biology and Anatomy, The University of Arizona

**Luca Guidotti, M.D., Ph.D.**, Director, Diabetes Research Institute, Head Immunopathogenesis of Liver Infections Unit, San Raffaele Scientific Institute; Associate Professor, Department of Immunology & Microbial Sciences, The Scripps Research Institute

**David Hafler, M.D., Ph.D.**, Breakstone Professor of Neurology (Neuroscience), Harvard Medical School; Physician, Brigham and Women's Hospital and Massachusetts General Hospital in Boston

**Janet Hafler, Ed.D.**, Visiting professor at Tufts University; Educational Consultant

**Matthias Von Herrath, M.D.**, full Member, Division of Developmental Immunology, Jolla Institute for Allergy and Immunology, La Jolla, California.

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

**Juan Carlos Lopez, Ph.D.**, Editor in Chief, Nature Medicine

**Vicki Seyfert-Margolis, Ph.D.**, Chief Scientific Officer, Immune Tolerance Network

**Alberto Martini, M.D., Ph.D.**, Professor of Pediatrics and Chairman, Dept of Pediatrics, University of Genoa; Director, Pediatria II, IRCCS G Gaslini, Genoa, Italy; Chairman, PRINTO.

**Martin Offringa, M.D., Ph.D.**, Professor and Head, Department of Pediatric Clinical Epidemiology; Emma Children's Hospital

**Berent Prakken, M.D., Ph.D.**, Professor of Pediatric Immunology at the University Medical Centre Utrecht, the Netherlands; Chair, EULAR

**Maria Grazia Roncarolo, M.D., Ph.D.**, Scientific Director, San Raffaele Scientific Institute; Professor of Pediatrics, School of Medicine and Surgery, San Raffaele Vita-Salute University; Chief of Clinic, Pediatric Immunology and Hematology and Clinical Research Unit (CRU-P) San Raffaele Hospital and San Raffaele Scientific Institute, Milan, Italy

**Norm Rosenblum, M.D.**, Professor of Paediatrics, Canada Research Chair in Developmental Nephrology, and Director of Clinician Scientist Training Programs, University of Toronto

**Additional faculty from Pharma, Venture Capital, intellectual property and regulatory will be integrated into the 2010 program.**

	Sunday, May 16, 2010	Monday, May 17, 2010	Tuesday, May 18, 2010	Wednesday, May 19, 2010	Thursday, May 20, 2010	Friday, May 21, 2010	Saturday, May 22, 2010	
	Coffee, participant interviews.	Off Site Team Building	Coffee, informal discussion.	Coffee, informal discussion.	Coffee, informal discussion.	Coffee, informal discussion.	Coffee, informal discussion.	
	Welcome and introductions (1.5 hrs)		Group dynamics (.5 hr) J. Hafler	"The art of startup: developing and securing intellectual property" (1.5 hr)  W. Fishburn	Joint Lecture. "Animal models" (1.25hrs)  Luca Guidotti, Matthias von Herrath	"In print, the mysteries of publication" (1.5 hrs)	"Interfacing Academia and Industry: EU and North American Perspectives" (1.5 hrs)	
	Facilitator: J. Hafler	15 minute break	"Defining the qualities of successful translational medicine" (1 hr)	<i>"Translational Genomics" (1 hr)</i>	<i>"The driving questions: shaping basic research and clinical trials" (1.25 hrs)</i>  <i>Candidates: Alberto Martini and Paul Krieg (concept a clinical trialist and a basic scientist) or Dennis Carson</i>	Moderators: D. Hafler, JC Lopez	M. Roncarolo, Salvo Albani. Other recommendations?	
	15 minute break		Seyfert-Margolis, Prakken	<i>Candidates: Eric Topol, Nancy Pedersen, Patrick Sullivan</i>		15 minute break	Case Study (1.5 hrs)	
	Joint Lecture. "Bridging the translational divide: A tale of two researchers" (2hr)		15 minute break		15 minute break	Unfolding case study 4 tutorial groups (1.5 hrs)		
			<i>"Research &amp; Regulation" (1 hr)</i>	Group Lunch	<i>"The art of start-up part II: the business perspective" (1hr)</i> <i>Candidates: Igor Bilinsky, other recommendations?</i>		N. Rosenblum	
	Salvo Albani, David Hafler		Group Lunch		Group Lunch	Facilitators: TBD	Group Lunch	
	Group Lunch			Unfolding case study 4 tutorial groups (1.5 hrs)				
			<i>"The role of VC in translational medicine" (1 hr)</i>	Facilitators: TBD Presentation Workshop (2.5hrs)	<i>20 minute presentation followed by debate. "Research Development and Pharma" (2hrs)</i>	Presentation Workshop II		
	Case Study (1.5 hrs)		<i>Candidates: J. Deleage</i> <i>"Discourse, dialogue and diatribe: effective communication" (1 hr)</i>		<i>Candidates - Jonathan Knowles (Roche), Jingwu Zang (GSK China), Eddie Chen (Genentech)</i>			
		Return to Ortigia; Break	<i>Candidates: J. Margolis (Obama Advisor, GMMB), Joe Cerrell (Bill and Melinda Gates Foundation)</i>					
	N. Rosenblum							
	Mentoring Session 1 (2 hrs)		15 minute break	Facilitators: TBD	Q&A with Wain Fishburn	Facilitators: TBD		
	Facilitators: TBD		Intro to the Presentation Workshop			Individual Consultations		
			V. Seyfert-Margolis		15 minute break			
					Unfolding case study 4 tutorial groups (1 hr)	Facilitators: TBD		
					Facilitators: TBD			