



CITE

COMBINING INTERDISCIPLINARY & TRANSLATIONAL EXPERTISE

Towards New Science for Public Health

Inaugural Workshop

December 6-7, 2012
Le Meridien Hotel
Arlington, Virginia



Workshop Objectives

- *Define new opportunities for partnership across the participating sectors (academe, industry, government, nonprofit institutes, foundations, venture capital organizations, etc.) and across scientific disciplines to reach the shared goal of significantly enhancing the development of approaches, new knowledge and products that positively impact society in the context of health and/or safety;*
- *Develop a path towards efficient new models for interaction that synergize existing strengths of the respective parties, and provide resources to address potential obstacles or deficiencies, thereby 'raising all boats';*
- *Create neutral but proactive platforms where opportunities to improve public health become a common objective of all stakeholders (e.g., industry, academia, government, foundations, etc.) rather than parallel, disconnected, or antagonistic activities.*
- *Generate innovative ideas and recommendations that will be captured in a publication to follow the workshop.*

Workshop Chairs

Syril Pettit, MEM – *HESI Executive Director*

Andrew Mazar, PhD - *Entrepreneur-in-Residence, Northwestern University*

Brian Berridge, DVM, PhD - *Director and Head, WW Animal Research Strategy
GlaxoSmithKline*

Ronald Hines, PhD, *Professor of Pediatrics and Pharmacology/Toxicology, Co-Chief, Section of
Clinical Pharmacology, Pharmacogenetics and Teratology at Medical College of
Wisconsin*

Marc Bonnefoi, DVM, PhD, *Head, North America R&D Hub, Global Head, Drug Disposition,
Preclinical Safety and Animal Research (DSAR), Sanofi US (in absentia)*



**COMBINING INTERDISCIPLINARY AND TRANSLATIONAL EXPERTISE
MOVING TOWARDS NEW SCIENCE FOR PUBLIC HEALTH**



**December 6-7, 2012
Le Meridien Hotel
1121 19th Street North, Rosslyn, VA**

December 6, 2012

- 9:00 a.m. Opening Remarks & Goals**– *S. Pettit, MEM, HESI Executive Director*
- 9:20 a.m. Introductions and Interests**
(1 min for each participant to state their affiliation, background, and goals for participation in this session)

SESSION 1: SETTING THE STAGE

- 10:00 a.m. Organizational Capital** – “A Birds Eye View of the Collaboration Space”
Melissa Stevens, MBA, Deputy Director, FasterCures
(25 minute talk plus 10 min questions)
- 10:35 a.m. Intellectual Capital:** “Transdisciplinary Approaches to Fostering New Science”
Jerry Lee, PhD, Deputy Director, Center for Strategic Scientific Initiatives, National Cancer Institute
(25 minute talk plus 10 minutes for questions)

- 11:10 a.m. Break**



December 6, 2012, Continued

11:25 a.m. Fiscal Capital: “Boosting Innovation through Crowd-Funding”
Nish Acharya, Director, Office of Innovation & Entrepreneurship & Senior Advisor to the Secretary of Commerce, US Economic Development Administration, US Department of Commerce *(25 minute talk plus 10 minutes for questions)*

12:00 p.m. Innovation Capital: “Crowd-Sourcing to Generate Innovation Capital – Case Studies in New Media Science”
Dwayne Spradlin, PhD, CEO, Innocentive
(25 minute talk plus 10 minutes for questions)

12:35 p.m. LUNCH

SESSION 2: CASE STUDIES

1:30 p.m. Case Studies in Collaboration: Translating New Science to Application in the Chemical, Agricultural, and Pharmaceutical Space. *Session Moderated by Dr. Ronald Hines, Medical College of Wisconsin*

Lead Discussants (~15-20 min per presentation)

- Chemical Safety and Risk Assessment: Dr. Timothy Pastoor, Syngenta, Chair, HESI Risk21 Committee
- Drug Discovery and Safety: Foundation for the NIH – Director of NIH Relations, Dr. Andrea Baruchin
- Agricultural Science and Innovation: iPlant Initiative: Stephen Goff, PhD, Program Director, I-Plant Collaborative at University of Arizona.

Panel/Discussion Questions (20 minutes): What guiding or organizational principles do these initiatives have in common and, What aspects/lessons learned from these (or other) translational programs should be applied and scaled to future initiatives?

2:50 p.m. Break



December 6, 2012, continued

SESSION 3: IDENTIFYING INCENTIVES AND HURDLES

3:10 p.m. Bringing Innovation in the Basic Research Setting to Application in Public Health: Incentives and Hurdles.

Thesis Question: *What are the challenges and best practices in building partnerships that translate science from early discovery/innovation to implementation? Feedback on Sept 2012 PCAST report: "Innovators require greater clarity about general regulatory pathways for innovative products and approaches."*

Moderated by Dr. Andrew Mazar, PhD, Northwestern

3:10 p.m. Lead Discussant Statements

(10 minute statement from each re: Thesis Question)

- Tom O'Halloran, PhD, Director Chemistry of Life Processes Institute – Northwestern University
- Wang Hui, PhD, Director Research Administration, Singapore National University
- Bill Slikker, Director FDA National Center for Toxicologic Research
- Mark Dutz, PhD, PRMED Innovation & Growth, The World Bank

4:00 p.m. Panel Discussion

4:30 p.m. Creating Cross-Sector and Cross-Discipline Partnerships: Are we Putting Promise into Practice? Moderated by Dr. Brian Berridge, DVM, PhD., GSK

A 2005 National Academies report on Facilitating Interdisciplinary Research identified the following key needs – almost 8 years later, how well are we doing in addressing these? How can we do better?

- *"Academic institutions should develop new and strengthen existing policies and practices that lower or remove barriers to interdisciplinary research and*



scholarship, including joint programs with industry and government and NGO organizations.”

- *“Journal editors should actively encourage the publication of IDR research results...”*
- *“Funding organizations should recognize and take into consideration in their programs and processes the unique challenges faced by IDR with respect to risk, organizational mode, and time.”*
- *“Funding organizations...should provide mechanisms that link interdisciplinary research and education and should provide opportunities for broadening training for researchers and faculty members.”*
- *“To facilitate the work of an interdisciplinary research team, its leadership should bring together potential research collaborators early in the process and work towards agreement on key issues.”*

- Kevin Haug, PhD, Director New Frontier Sciences, Takeda
- Michael P Holsapple, PhD, DABT, Senior Research Leader, Battelle Memorial Laboratories
- Dr. Hal Zenick, Director National Health and Environmental Effects Lab, EPA
- Dr. Jan Johannessen, OTS Deputy Director for Science, FDA
- Kathy Megyery, Vice President of Innovation & Healthcare in Corporate Affairs, Sanofi

5:15 Review of Day

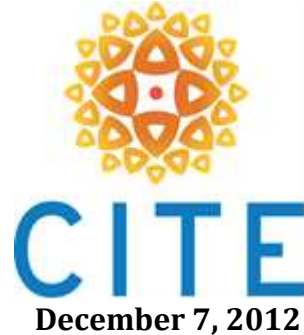
5:30 Reception

6:30 pm – 9:00 p.m. Dinner and Evening Keynote Lecture
(Special thanks to Sanofi for sponsoring this evening event)

**“Trends in Translating Science from Discovery to Application:
Where have we been and where do we need to go?”**
Dr. Kelly LaMarco, Senior Editor, Science Translational Medicine



**Combining Interdisciplinary and Translational Expertise (CITE):
Towards New Science for Public Health**



December 7, 2012

9:00 am – 11:00 am **Breakout Session for Gaps Analysis**
Participants move to assigned breakout groups (See Attachment 1). Moderator and Rapporteur for Each Session to facilitate discussion and capture feedback/recommendations.

Challenge Questions

Facilitating Interdisciplinary Science

(Across different scientific fields, across industry/academe/government, etc.).

- *What actions or philosophy changes must be put in place to augment the frequency and relevance of interdisciplinary and cross-sector (academic, govt, industry, research facilities, clinical, funding bodies, foundations, etc) interactions?*
 - *Are there incentives to be created?*
 - *Are there hurdles to be removed?*
 - *Specify or give examples of what has worked and why and what hasn't and why.*

Translational Science (moving science from early innovation to application)

- *What should be done to create new (or facilitate existing) incentives and frameworks to foster this type of translational science?*
- *Who should take the lead in enacting these recommendations?*



**Combining Interdisciplinary and Translational Expertise (CITE):
Towards New Science for Public Health**



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December 7, 2012, Continued

- 11:30 a.m.** **Grab Box Lunches**
- 11:45 a.m.** **Eat and Report Back from Breakouts**
- 1:00 p.m.** **Synthesis Discussion – What are the top 3 areas where the scientific community can affect change to drive more fluid translation and collaboration?**
- 1:30 pm** **ADJOURN**



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