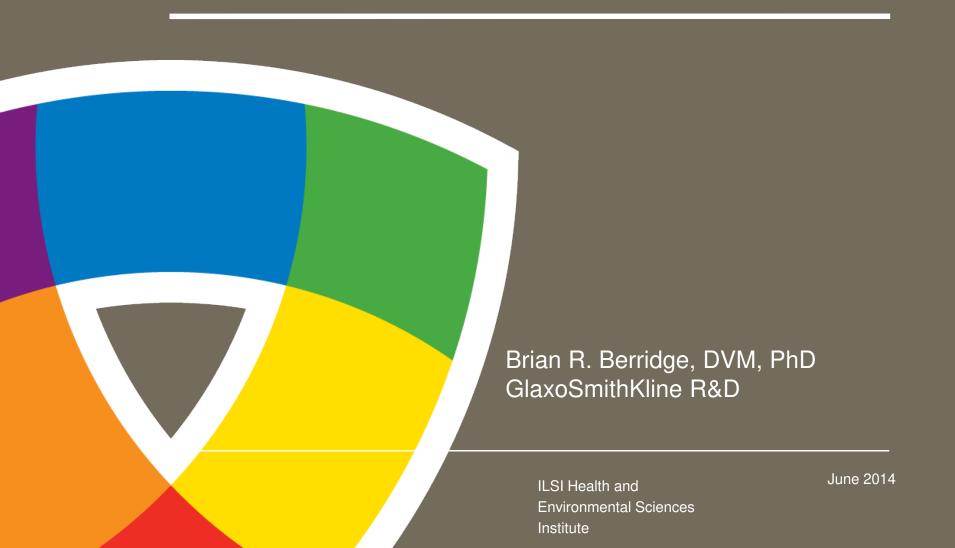
HESI's Role in Translational Science via CITE



What is CITE?



Combined Interdisciplinary and Translational Expertise

- Inaugurated by a workshop in December, 2012, entitled 'Towards New Science for Public Health
- Broad sector/discipline participation
- Consensus on value
- Explored mechanisms of collaboration, funding, and training





Syril D. Pettit is Executive
Director of the Internationa
Life Sciences Institute (ILSI)
Health and Environmental
Sciences Institute (HESI), a

POLICY

From Silos to Multilingual Science

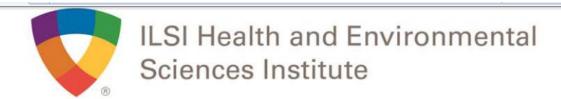
TRANSLATION—THE PROCESS OF MOVING SCIENCE FROM DISCOVERY TO application—has become a mantra of collaborative science initiatives worldwide. It extends from the drug and medical device development arena, to chemical safety, agricultural research, environmental sustainability, and beyond. These efforts are set against a backdrop of complex challenges in the prevention and treatment of emerging and chronic diseases and increasing environmental impacts associated with population growth and industrialization. Undoubtedly, there is a critical need for multidisciplinary scientific initiatives that move research from the pages of a journal to the promotion of public health (1, 2). Basic researchers, clinicians, regulators, industrial scientists, and entrepreneurs are all strongly invested in the "why" and "what" of translational science. But what about the "how"?

www.ScienceTranslationalMedicine.org 12 February 2014 Vol 6 Issue 223 223ed3

"Basic researchers, clinicians, regulators, industrial scientists, and entrepreneurs are all strongly invested in the 'why' and 'what' of translational science. But what about the 'how'?

"...we must do more to enhance the "how" with relevant training, experience, and incentives."

What's the fit for HESI? It's our Mission



Creating Knowledge for a Healthier, Sustainable World

Since 1989, the Health and Environmental Sciences
Institute (HESI) has engaged scientists from academia,
government, industry, research institutes and NGOs to identify
common health and environmental concerns and develop
scientific knowledge leading to a healthier, more sustainable
world.

Shared Challenges, Shared Solutions

HESI's multi-sector, multidisciplinary stakeholders are passionate about working together to answer pressing scientific questions.

Quick HESI Facts

Non-profit scientific organization

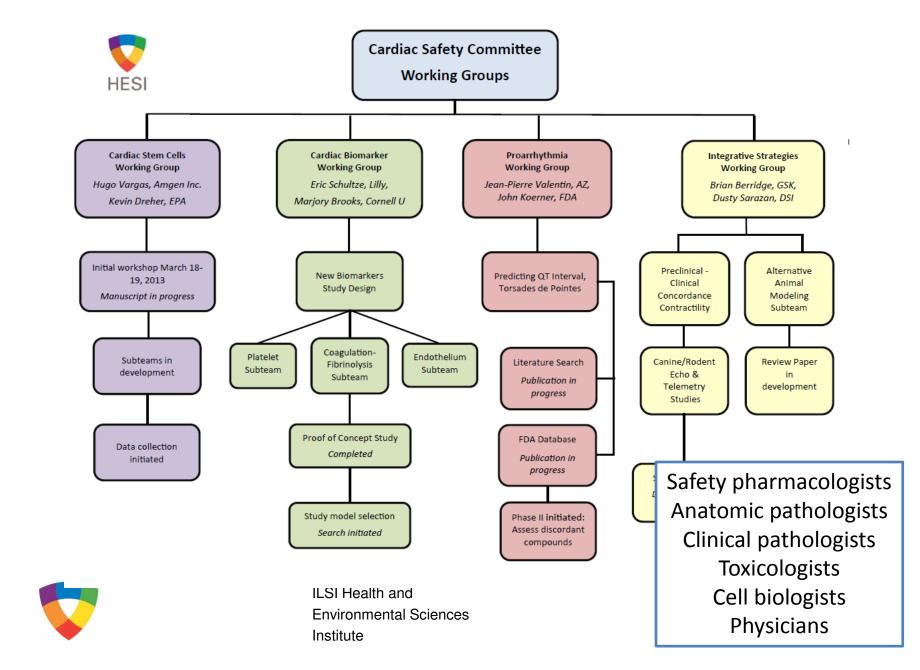
Global reach and involvement

Human and environmental health science focus

25 years of expertise in public-private collaborations



How does that manifest in our committees and working groups?



Committees pushing the envelope-Bridging disciplines in cardio-oncology





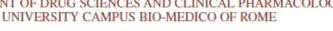
International Colloquium on Cardio-Oncology

Rome (Italy), March 12-14, 2014

Hotel Columbus - Via della Conciliazione, 33

Organized by
DEPARTMENT OF DRUG SCIENCES AND CLINICAL PHARMACOLOGY

Oroopized by





and with the Patronage of SIE - Società Italiana di Ematologia



The application for European accreditation has been granted 11 European CME credits (ECMEC) by the European Accreditation Council for Continuing Medical Education (EACCME)





FONDAZIONE INTERNAZIONALE MENARINI









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Draft 28 May 2014 - Presubmission, Do not cite

Opportunities to Meet Clinical Cardio-Oncology Needs with New Approaches to

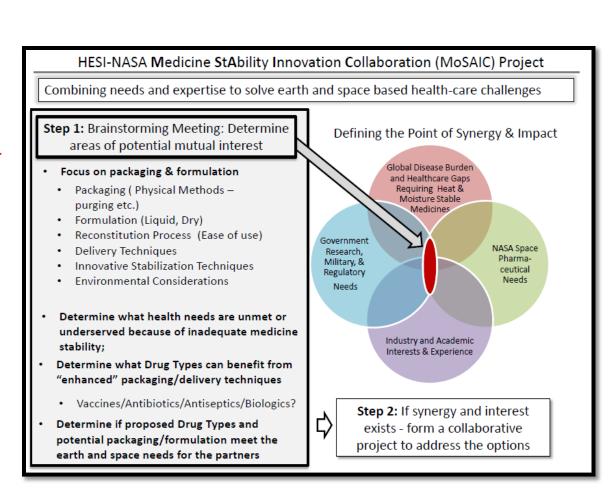
Nonclinical Safety Assessment

Berridge¹, B. R., Pettit, S². and Sarazan³, R. D.

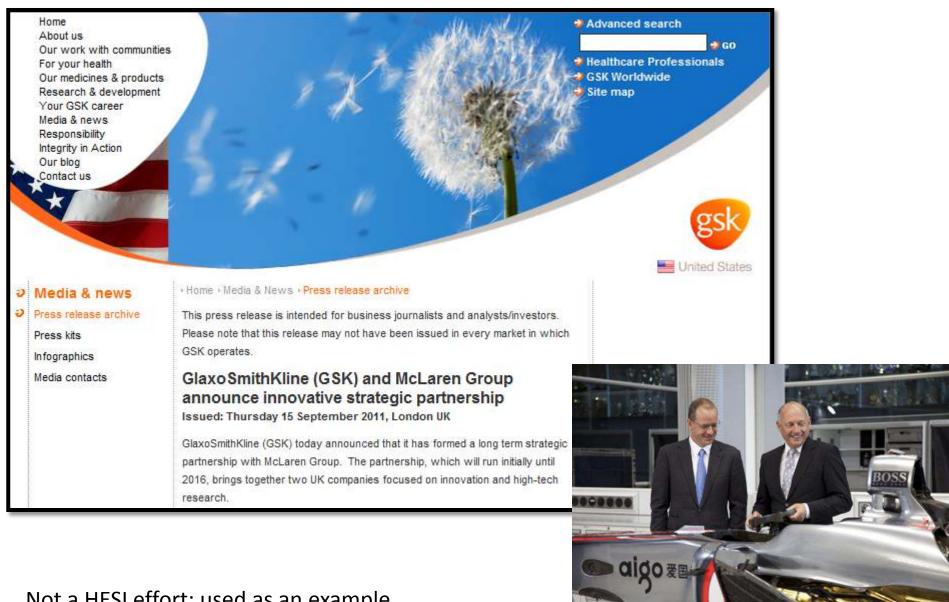
Interesting Conversations

NASA Human Health Challenges

- Markers of health, disease and therapy
- •In-flight bio-sample analysis
- Non-invasive imaging
- Drug delivery
- PK capabilities
- Drug stability
- Cell/tissue/animal models
- Sterilization systems



Interesting Partnership Opportunities

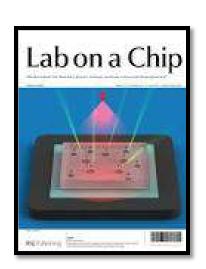


Not a HESI effort; used as an example

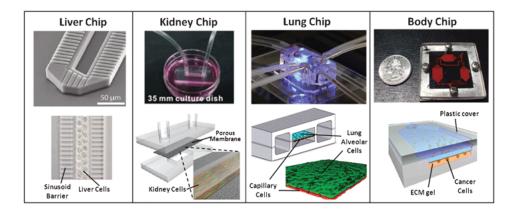
Potential for Re-inventing Approaches to Health and Therapeutics



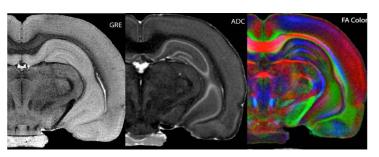
3D Tissue printing



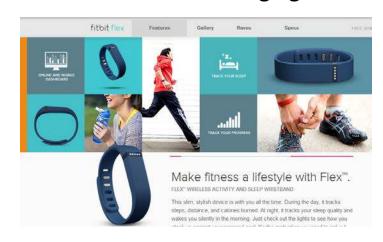
Miniaturization



Novel testing platforms



Advanced Imaging







Realizing the Potential

- Technology is not a limitation!
- Recognizing opportunity is not a limitation!
- Putting the two together is a challenge
- Requires intent, expertise and resource
- HESI uniquely positioned to facilitate



