

# Discussion: Strategic Statistical Partnerships Impacting Health and Education For the Public Good

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**EVERYONE COUNTS**  
Data for the Public Good

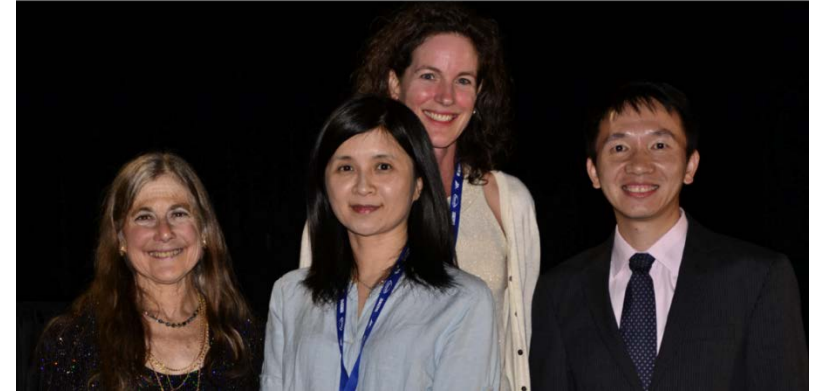


# Statistical Partnerships Among *Academe, Industry, and Government* (SPAIG) Award

- Established in 2002, the SPAIG Award highlights outstanding partnerships among academe, industry, and government organizations, as well as promotes new partnerships.
- This award is distinct from other ASA awards in that it recognizes outstanding collaborations between organizations, while recognizing key individual contributors.

# Impact of Collaborations

- Connects sectors of the discipline: academe, government and industry
- Motivates and speeds up methodological development by connecting to real-world problems
- Trains the next generation of statisticians and data scientists
- Brings statisticians and statistics to the decision-making table



# Congratulations and Thanks

- Clinical Tests in Cancer (Lisa Meier McShane)
- Dengue Vaccine – Fred Hutchinson and Sanofi Pasteur (Ying Huang)
- Next Generation of Data Scientists –
  - Five College Statistics Program and MassMutual
    - Amherst College (Nicholas Horton)
    - MassMutual (Christine Pfeil)

# Specific Lessons Learned (1)

## Clinical Tests in Cancer (Lisa Meier McShane)

- Three exemplar collaborations to assess reliability and reproducibility and harmonize biomarker tests in cancer
- Motivated by transformation to precision medicine
- Weak regulatory oversight
- Industry, academia, government agencies, *international/national, and advocacy groups* (patient-centered outcomes research)

NEWS&ANALYSIS

Jocelyn Kaiser

CLINICAL MEDICINE

Science, v. 335, March 30, 2012

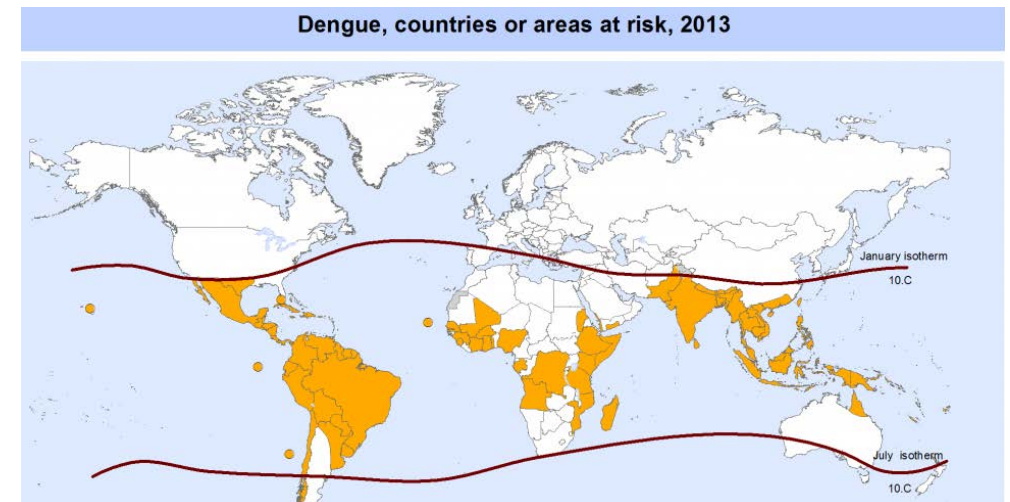
**Biomarker Tests Need Closer Scrutiny, IOM Concludes**



# Specific Lessons Learned (2)

## Dengue Vaccine – Fred Hutchinson and Sanofi Pasteur (Ying Huang)

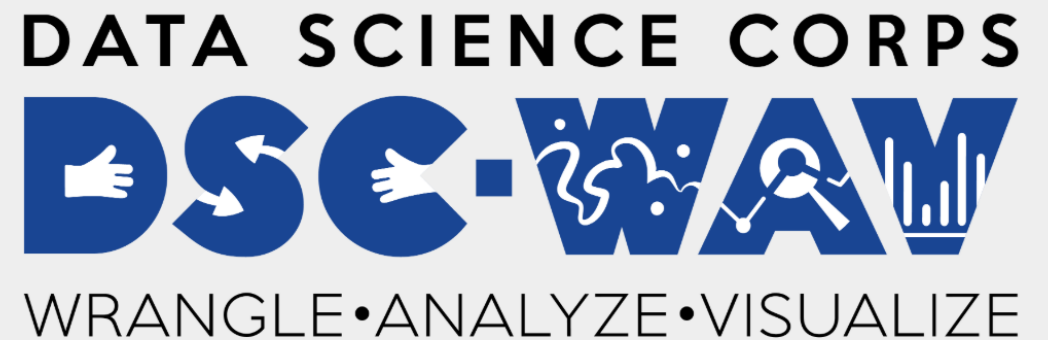
- ~390M infections/year, > 100 countries impacted
- Correlates of risk and of protection, bridging analysis
- Collaboration begun in 2013 with both short-term and longer-term objectives
- Partnership to motivate and develop novel methods
- Real-life data for doctoral training
- Productivity and dissemination



# Specific Lessons Learned (3)

Next Generation of Data Scientists – Five College Statistics Program and MassMutual; Amherst College (Nicholas Horton) and MassMutual (Christine Pfeil)

- Precipitating event was a DataFest
- Consortium of academic institutions
- Engagement, partnership, collaboration with community via community colleges and local projects
- Win/win for industry and academic institutions through training potential employees and diversifying workforce





# What is Leadership

- The ability to consistently deliver value to an organization or cause by inspiring people to take a specific direction or action when they truly have the freedom or choice to do otherwise.
- Statistical leaders purposefully put themselves at the center of issues that are critical to their organizations. Using their knowledge of the organization, they motivate others to initiate change, develop solutions, and create value by acting on data and statistical reasoning.





# Thank You

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**JSM**  **2020**  
August 2-6  
VIRTUAL CONFERENCE

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 **COLLEGE OF SCIENCE**  
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# Questions for Speakers

- What makes for a successful partnership?
- What makes for an unsuccessful one?
- What should one make sure to do right at the beginning?
- How to incentivize collaboration within and across institutions? How is credit given?
- Who should be involved in engagement and leadership of collaboration, particularly with respect to early-career faculty and professionals?

