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**Principles for Data-Driven Decision Making
Symposium Agenda**

September 14, 2017

Keck Center, Room 100, 500 5th St. NW, Washington DC

WEBCAST: http://sites.nationalacademies.org/DEPS/BMSA/DEPS_180903

MEETING GOALS:

- Describe government, business, and DOD applications of data analytics to inform decision-making;
- Call attention to methodological and organizational challenges in using analyses based on complex data in a specific decision context;
- Provide a set of underlying principles that non-technical decision makers can recall when presented with new analyses.

9:00 AM **Strengthening Data Science Methods for DOD Personnel & Readiness**
Stephen Robinson, University Wisconsin Madison

9:05 AM **Introduction to the workshop and the promise and challenges of data driven decision making**
Stephanie Shipp, Biocomplexity Institute of Virginia Tech.

9:25 AM **Opening Keynote**
-David Yokum, The Lab @ DC

10:05 AM **Principle 1: Question the data and analysis pipeline.** *Ask about uncertainty in the data and analysis. Ask what assumptions were made and ask if the model can*

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be validated? Are there other methods available and do they give similar results?
Moderated by Joe Langsam, University of Maryland.

Description of decision context and constraints—Policing Albuquerque
-*Scott Darnell, Albuquerque Innovation Team*
Description of case study—Analytics for policing
-*David Higdon, Biocomplexity Institute of Virginia Tech*
Panel discussion

11:20 AM Break

11:35 AM Principle 2: Know your population and ask if the data match. *Ask what the ideal data would be (or ideal experiment to get that data) and ask how and why your data is different.* Moderated by Stephanie Shipp

Description of the decision context—Military health care benefit design
-*Christopher Meyer, Center for Naval Analyses*
Description of case study—Analyses for accurate population modeling
-*Sarah K. Burns, Institute for Defense Analyses*
Panel discussion

12:50 PM Lunch

1:35 PM Principle 3: Ask how the data and analysis drives a decision. *Ask what the decision tradeoffs are.* Moderated by Bill Strickland, HumRRO

Description of decision context and constraints—Workforce management at IBM
-*Chid Apte, IBM*
Description of case study—Prescriptive Analytics for IBMs Workforce
-*Mark Squillante, IBM*
Panel discussion

2:50 PM Break

3:05 PM Closing keynote presentation—The Federal Perspective
-*Robert Shea, Commission on Evidence-Based Policymaking*

3:35 PM Closing keynote presentation—The Organizational Perspective
-*Fred Oswald, Rice University*

4:05 PM Open Discussion. Moderated by Joe Langsam

5:05 PM Adjourn