

## Truth in Testimony Disclosure Form

In accordance with Rule XI, clause 2(g)(5)\* of the *Rules of the House of Representatives*, witnesses are asked to disclose the following information. Please complete this form electronically by filling in the provided blanks.

**Committee:** Science, Space, and Technology

**Subcommittee:** Energy

**Hearing Date:** 05/19/2021

**Hearing Title** :

Accelerating Discovery: the Future of Scientific Computing at the Department of Energy

**Witness Name:** Karen E Willcox

**Position/Title:** Director, Oden Institute for Computational Engineering and Sciences, University of Texas at Austin

**Witness Type:**  Governmental  Non-governmental

**Are you representing yourself or an organization?**  Self  Organization

**If you are representing an organization, please list what entity or entities you are representing:**

### **FOR WITNESSES APPEARING IN A NON-GOVERNMENTAL CAPACITY**

**Please complete the following fields. If necessary, attach additional sheet(s) to provide more information.**

**Are you a fiduciary—including, but not limited to, a director, officer, advisor, or resident agent—of any organization or entity that has an interest in the subject matter of the hearing? If so, please list the name of the organization(s) or entities.**

Oden Institute for Computational Engineering and Sciences, University of Texas at Austin  
American Institute of Aeronautics and Astronautics (AIAA) Board of Trustees  
Institute for Mathematical and Statistical Innovation (IMSI) Advisory Board  
Advanced Simulation and Computing (ASC) Advisory Board at the Los Alamos National Laboratory  
Society for Industrial and Applied Mathematics (SIAM) Activity Group on Data Science (current Program Director)  
National Science Foundation (NSF) Advisory Committee for Cyberinfrastructure (current Co-chair)  
National Academies Board on Mathematical Sciences and Analytics  
Computing and Information Science Research Foundation, External Review Board, Sandia National Laboratories

**Please list any federal grants or contracts (including subgrants or subcontracts) related to the hearing’s subject matter that you, the organization(s) you represent, or entities for which you serve as a fiduciary have received in the past thirty-six months from the date of the hearing. Include the source and amount of each grant or contract.**

See attached list.

**Please list any contracts, grants, or payments originating with a foreign government and related to the hearing’s subject that you, the organization(s) you represent, or entities for which you serve as a fiduciary have received in the past thirty-six months from the date of the hearing. Include the amount and country of origin of each contract or payment.**

Design Computation, Singapore University of Technology and Design, Singapore, \$400,000 (2018-2020).

**Please complete the following fields. If necessary, attach additional sheet(s) to provide more information.**

- I have attached a written statement of proposed testimony.
- I have attached my curriculum vitae or biography.

\*Rule XI, clause 2(g)(5), of the U.S. House of Representatives provides:

(5)(A) Each committee shall, to the greatest extent practicable, require witnesses who appear before it to submit in advance written statements of proposed testimony and to limit their initial presentations to the committee to brief summaries thereof.

(B) In the case of a witness appearing in a non-governmental capacity, a written statement of proposed testimony shall include— (i) a curriculum vitae; (ii) a disclosure of any Federal grants or contracts, or contracts, grants, or payments originating with a foreign government, received during the past 36 months by the witness or by an entity represented by the witness and related to the subject matter of the hearing; and (iii) a disclosure of whether the witness is a fiduciary (including, but not limited to, a director, officer, advisor, or resident agent) of any organization or entity that has an interest in the subject matter of the hearing.

(C) The disclosure referred to in subdivision (B)(iii) shall include— (i) the amount and source of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) related to the subject matter of the hearing; and (ii) the amount and country of origin of any payment or contract related to the subject matter of the hearing originating with a foreign government.

(D) Such statements, with appropriate redactions to protect the privacy or security of the witness, shall be made publicly available in electronic form 24 hours before the witness appears to the extent practicable, but not later than one day after the witness appears.

**False Statements Certification**

Knowingly providing material false information to this committee/subcommittee, or knowingly concealing material information from this committee/subcommittee, is a crime (18 U.S.C. § 1001). This form will be made part of the hearing record.

\_\_\_\_\_  
Witness signature



5/17/21  
\_\_\_\_\_  
Date

*Please list any federal grants or contracts (including subgrants or subcontracts) related to the hearing's subject matter that you, the organization(s) you represent, or entities for which you serve as a fiduciary have received in the past thirty-six months from the date of the hearing. Include the source and amount of each grant or contract.*

**Relevant federal grants and contracts received by Karen E. Willcox May 2018 – May 2021**

DiaMonD: An Integrated Multifaceted Approach to Mathematics at the Interfaces of Data, Models and Decisions, Department of Energy, \$3,000,000

AEOLUS: Advances in Experimental Design, Optimal Control, and Learning for Uncertain Complex Systems, Department of Energy, \$5,998,946

AEOLUS: Advances in Experimental Design, Optimal Control, and Learning for Uncertain Complex Systems, Department of Energy, \$525,000

RISE of the Machines: Robust, Interpretable, Scalable, Efficient Decision Support, Department of Energy, \$1,198,790

Exascale Predictive Simulation of Inductively Coupled Plasma Torches, Department of Energy, \$16,500,000

Learning Optimal Aerodynamic Designs, ARPA-E, \$1,399,537

(MURI 14) A Unified Mathematical and Algorithmic Framework for Managing Multiple Information Sources of Multi-physics Systems, Air Force Office of Scientific Research, \$7,127,452

Dynamic Data Driven Methods for Self-aware Aerospace Vehicles, Air Force Office of Scientific Research, \$1,274,520

Coupling in Uncertain Multi-physics Systems, Air Force Office of Scientific Research, \$589,407

Machine Learning for Physics-based Systems: Optimal Approximations, Architectures, and Training, Air Force Office of Scientific Research, \$1,949,945

Multi-Fidelity Modeling of Rocket Combustor Dynamics, Air Force Office of Scientific Research / Air Force Research Laboratory, \$719,746

Data Science Solutions for Improving Effectiveness of High Fidelity CFD in Propulsion, Air Force Research Laboratory – Jacobs, \$537,611

FAST: Full Airframe Sensing Technology for Hypersonic Aerodynamics Measurements, NASA, \$3,300,000

CDS&E: Collaborative Research: A Bayesian Inference Framework for Management of CO<sub>2</sub> Sequestration, National Science Foundation, \$139,614