

**Truth in Testimony Disclosure Form**  
**Attachments**  
**for**  
**Erica R.H. Fuchs**

**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.**

**Principal Investigator**

1. With co-PIs Valerie Karplus, Jay Whitacre, Shawn Blanton, Ken Mai, Lee Branstetter, Ramanya Krishnan, Peter Zhang, Ed Hovy. Technical Advisors: Larry Pillegi, Destenie Nock. Engineering Competitiveness: Critical Technologies and Critical Supply Chains. **Carnegie Mellon University, College of Engineering, Moonshot Award.** \$1.32M across three schools: (*College of Engineering*: College of Engineering Dean's Office - \$594,090.18; Department of Engineering and Public Policy, Department of Materials Science and Engineering, Department of Electrical and Computer Engineering, and Department of Civil and Environmental Engineering - \$398,607; *School of Computer Science*: Language Technologies Institute - \$170,688; *Heinz College of Information Systems and Public Policy*: \$159,660)
2. With co-PIs Valerie Karplus and Granger Morgan. An Open-Source Decision Tool to Identify and Support Responses to Emergent Constraints in the Medical Supply Chain. **Block Center for Technology and Society. Carnegie Mellon University.** \$60,000.
2. Accelerating U.S. Competitiveness in Integrated Photonics: Quantifying Workforce Training Needs. **SUNY (Albany) / U.S. Air Force Research Lab (AFRL).** Contract funded through **AIM Photonics.** \$100,000
3. Worker Resilience and Innovation in U.S. Manufacturing. **The Keystone Research Center.** \$40,000 gift.
4. EPP Project Course on Technology Development Zones: The Case of Neighborhood 91. **The Barnes Group Advisors.** \$5000 gift.
5. EPP Project Course on Technology Development Zones: The Case of Neighborhood 91. **Allegheny County Airport Authority.** \$20,000 gift.

6. With Co-PIs Laurence Ales, Brian Kovak, Katie Whitefoot. Not all Technologies are Equal: Measuring and Disentangling the Labor Effects of Technology Change in Manufacturing. **National Science Foundation (NSF) Science of Science and Innovation Policy Program.** \$649,959
7. With co-PIs Alex Davis, Parth Vaishnav, and Aarti Singh. Accelerating Navy Readiness: Expert Guided Machine Learning Algorithms for AM Candidates. **U.S. Navy (NAVSUP)** Sole Source Agreement funded through America Makes. July 2019-November 2019. \$250,000. (\$200,000 to CMU, \$50,000 to America Makes.)
8. With co-PI Katie Whitefoot. The Cost of Complexity and the Value of Simplification. **Kennametal Corporation.** September 2018-August 2019. \$140,000 gift.
9. With co-PIs Laurence Ales, Brian Kovak, and Katie Whitefoot. Technology Change in Manufacturing and Labor Outcomes: Not all Technologies are Equal. **National Bureau of Economic Research** (funds from the Kaufmann Foundation). July 2018-June 2019. \$20,000

#### **Co-Principal Investigator**

1. PI: Anthony Rollett, co-PIs Fuchs, E., Beuth J., Holm, L. Shimada, Wicker, To, Lewandowski, Stebner, Narra. Development of an Ecosystem for Qualification of Additive Manufacturing Processes and Materials in Aviation. **NASA-ULI.** September 2019-August 2022. \$5,975,829
2. PI: Kovak, Brian, Co-PIs Ales, L., Fuchs, E., Whitefoot, K. Emerging Manufacturing Technologies and the Demand for Skills. **Russell Sage Foundation.** Grant # 1808-07627. April 1, 2019 – November 30, 2020. \$149,244
3. PI: Kovak, Brian, Co-PIs Ales, L., Fuchs, E., Whitefoot, K. Emerging Manufacturing Technologies and the Demand for Skills. **Carnegie Mellon University Manufacturing Futures Initiative.** September 2018-August 2019. \$132,931.
4. PI: Davis, Alex, Co-PIs Fuchs, E., Kara, B., Poczos, B., Singh, A., Whitefoot, K. Accelerating Metal Additive Manufacturing Commercialization and Military Readiness: Expert guided machine learning to identify candidate parts and subassemblies for additive manufacturing. **Carnegie Mellon University Manufacturing Futures Initiative.** September 2018-August 2019. \$177,799

5. PI: Whitefoot, Katie, Co-PI Fuchs, E. Cost-competitive Mass Customization for Non-Assembly Manufacturing Environments in the Greater Pittsburgh Region. **Pennsylvania Infrastructure Technology Alliance (PITA)**. January 1, 2018-December 31, 2018. \$70,000.

### **Faculty Associate**

1. Lead investigator on one and co-investigator on a second of eight total sub-projects. PI: Jack Beuth, co-PIs: Tony Rollett, Liz Holm, L. Burak Kara, Barnabas Poczoz, Amir Farimani, Aarti Singh. Artificial Intelligence Enabled Additive Manufacturing: Enhancing expeditionary Manufacturing Capabilities up to the Point-of-Need for the US Army, ARL Cooperative Agreement, \$3,540,000, July 2020-June 2021

**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.**

1. PIs: Granger Morgan (CMU) and Joana Mendonca (Portugal). PhD student support under the CMU-Portugal Program via Fundação para a Ciência e Tecnologia, Portugal. September 2020 until end of Ph.D. (estimated end date May 2024). Student spends half of the Ph.D. at Institute Superior Technico (IST), during which time the funds cover tuition at IST and standard IST Ph.D. student stipend, and half of the Ph.D. at Carnegie Mellon University (CMU), during which time the funds go to cover standard tuition and stipend at CMU (Estimated: AY 2021-2022 \$75,480; AY 2022-2023 \$75,480). The CMU faculty PI also receives an annual discretionary fund of \$4200 to cover travel and other expenses related to the research outside tuition and stipend.
2. Invited Speaker. Launch by the Joint Research Centre of the European Commission (JRC)'s report on China: Challenges and Prospects from an Industrial Powerhouse. Brussels, Belgium. May 23, 2019. The European Commission reimbursed travel costs, accommodation, and daily allowances for a period as close as possible to the meeting dates and time. Total Reimbursement: \$10,232,43 USD.
3. Invited Speaker and Participant. "EIC Programme Managers Workshop -- identifying, developing and deploying breakthrough and disruptive innovation." Expert Workshop with the European Commission on the Implementation of the European Innovation Council (EIC) -- "a DARPA-like organization focused on market-oriented technologies). Workshop launched and concluded by Carlos Moedas, European Commissioner for

Research, Science, and Innovation. Brussels, Belgium. February 22, 2019. The European Commission reimbursed travel expenses, a daily allowance per meeting day, and an accommodation allowance in accordance with their Reimbursement of Expert's Expenses rules. Total Reimbursement \$8876.92 USD.