**July 28, 2022, Congressional Briefing: Artificial Intelligence**

**Questions Received**

Questions Answered During Briefing

* The National Science Foundation’s new directorate is focused on new critical and emerging technologies, and AI certainly falls into that category. In your opinion, is there research within AI that the new directorate should look to focus on in its early stages?
* How will AI change the way in which medical professionals care for their patients?
* What checks and balances for AI technology are in place or are needed to maintain control of AI-based systems?
* Regarding predictive imaging: are there quality and patient safety measures in place?
* Do you think AI will be more or less trusted by the general public compared to scientists?
* Are there specific specialties that will be most transformed by AI?
* What are the roles of the private sectors (i.e. Apple's Health app and data) and relationship that public health professionals should have moving forward?
* What should we be teaching our kids about AI?

Other Questions Received

* What are avenues budding technologists can pursue to contribute to AI policy work?
* Are autonomous technologies going to be held to higher standards than human performance?
* How can AI contribute to creating a more suitable future for the human race?
* Related to AI in health care: Regarding data privacy, how one can access the data for any new AI system. Is there any research on using block chain and AI?
* For healthcare applications of AI, Dr. Elena was emphasizing applications which augment human performance. Are there examples where the human operator (and all of their human factors) are bypassed?
* With regards to the safety of medical data, especially ones that are possible biometric markers, how can AI help? How would medical images be stored and encrypted?
* Medical researchers look for independent REPLICATION of study results to mitigate bias, using different researchers and different study populations. How are these principles used in AI?
* Is there a global governing body thinking through ethical issues and controls related to AI?
* How is AI currently being used in support of AI imaging / detection of cancer?
* What is the timeline for AI advancement in various applications?
* Will surgeons in future be required to have a deep understanding of AI - how it works, and how to use it?
* How do governments resolve the conflict between open access to data to train innovative AI for public use-cases with the need for strong data privacy and protection legislation?
* What consequences do the rise of autonomous AI technologies spell for job opportunities within health care? Do the benefits of AI technologies--namely the additional accuracy and precision they offer compared to humans--outweigh these consequences?
* Is AI expected to be a goal in the end or the means to some other end? What will we do with the real (bio) intelligence which will be available after the availability of new tools?
* What is the state of machine learning for targeted identification of high-needs clients and personalized health and social services provision?
* Can you please talk to the evolving landscape in how medical devices and associated data systems are being used in decision making? Further, how is (or isn't) the regulatory environment evolving to adapt to the needs of both clinicians and industry?
* How are we best able to identify risks associated with AI?
* Please comment on privacy issues in data collection in relation to globally varied privacy laws.
* With artificial intelligence finding increasing potential in healthcare, do you see issues related to liability arising in future? And how should we approach dealing with those issues?
* AI can identify at risk population to facilitate preventive care. While our healthcare and reimbursement systems are base focusing on treatment rather than prevention. How will we change the policies?
* Are there ways for AI algorithms to consider and mitigate human bias?