## Neuroscience and society: Envisioning brain science for a better future

Research! America March 6, 2023

**Caroline Montojo, Ph.D.** President and CEO Dana Foundation



## **Dana Foundation History**



## Neuroscience advances carry significant ethical, legal, and societal implications



Coordinating Global Brain Projects Conference, Rockefeller University, September 2016

"The ethical questions raised by neurotechnologies are international questions... they can carry more ethical, legal, or social weight because the activity of our brains leads to our innermost selves."

Yuste and Bargmann, Cell 2016

## Neuroscientists must navigate complex ethical issues



## THE WALL STREET JOURNAL. How Brain-Computer Interfaces Could Restore Speech and Help Fight Depression

Neurosurgeon Eddie Chang, a leader in a technology that turned the brain signals of a paralyzed man into words, envisions further advances in therapeutic implants



"Someday in the future we might be able to decode what people are thinking" which raises "some really important questions about the ethics of this kind of technology."



## **Dana Foundation Values**

We are bold.

We build trust.

We are collaborative.

We lead with empathy.

We value diversity.

We stay grounded.



# **Dana Education:** Sparking interest and education around neuroscience and the ways it interfaces with our lives



Annual global education initiative with ~6,000 partners in 120 countries







**Dana NextGen:** Developing a new generation of interdisciplinary experts who shepherd neuroscience uses for a better world

## **Dana Centers for Neuroscience & Society**



- Training to embed neuroscience in societal context
- Catalytic grants for interdisciplinary work
- Growing future leaders



## **Eleven institutions funded for Dana Center Planning Grants**

















Massachusetts Institute of Technology

# **Dana Frontiers:** Growing capacity for informed public reflection on emerging neuroscience and neurotechnology



### Brain Health Issues Directly Impact More Than 8 in 10 Americans

Have you or anyone close to you had or have any of the following conditions?





Source: A Research!America survey of U.S. adults conducted in partnership with the Dana Foundation and Zogby Analytics in August 2022.



#### Brain Health Is Among Most Important Health Issues

What are the most important health issues facing America?





Source: A Research!America survey of U.S. adults conducted in partnership with the Dana Foundation and Zogby Analytics in August 2022.



### Americans Are Not Knowledgeable About Brain Health Research

How knowledgeable would you say you are about brain health research?



#### Doctors, Nurses, and Researchers Are Most Trusted Sources of Brain Health Information

To what extent do you trust the following sources of information on brain health?



#### **Americans Are Curious and Hopeful About Brain Health Research**

Please select from the following the top five words that best reflect your attitudes towards brain health research:





-oundation



### 6 in 10 Say Patients Should Have a Voice in Determining Research Priorities

Some people say that patients should have more of a voice in determining brain health research priorities. In general, which statement most closely matches your view?







Source: A Research!America survey of U.S. adults conducted in partnership with the Dana Foundation and Zogby Analytics in August 2022.



New approaches to education, training, research, and public engagement are needed across sectors to address ethical and societal issues in neuroscience





Brain science for a better future.