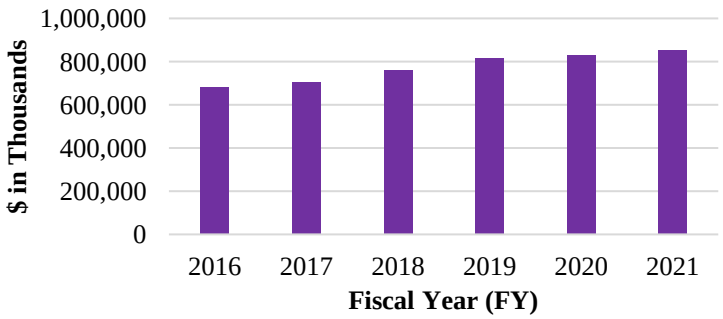
National Center for Advancing Translational Sciences

NCATS "Unique" Mission

NCATS was established in Fiscal Year 2012 to **shorten the journey from scientific observation to clinical intervention so that new treatments and cures for disease can reach patients faster**. The Center strives to develop innovations to reduce, remove, or bypass costly and time-consuming bottlenecks in the translational research pipeline to speed the delivery of new drugs, diagnostics, and medical devices to people who need them. NCATS studies translation on a system-wide level as a scientific and operational problem.

Appropriations History



FY 2022 President's Budget (PB) is $879.0 million.

NCATS Strategy for Bringing More Treatments to More People, More Quickly

With the aim of accelerating translational research to benefit all diseases and disorders, NCATS supports the development of innovative research tools and technologies, along with expertise and collaborative teams, that can quickly pivot to address urgent public health issues. In addition, by using its networks to draw together experts with necessary and complementary skills, knowledge, and experience, NCATS enables research projects to cut through operational roadblocks. These robust yet nimble approaches are being leveraged to address public health emergencies, including the opioid crisis and COVID-19 pandemic.

Joni L. Rutter, Ph.D., became the NCATS Acting Director on April 16, 2021. She is internationally recognized for her work in basic and clinical research in human genetics.

NCATS Facts (FY 2020):

- ~ 3,000 drugs and compounds in the NCATS Pharmaceutical Collection (NPC) for drug screening
- 60 Clinical and Translational Science Awards (CTSA) hubs
- One Trial Innovation Network, including three Trial Innovation Centers (TICs) and one Recruitment Innovation Center (RIC)
- The Rare Disease Clinical Research Networks (RDCRN) consists of 20 consortia studying more than 200 rare diseases
- 230 active intramural research collaborations
- 22 patents issued for NCATS' inventions (2018-2020)

NCATS
COLLABORATE. INNOVATE. ACCELERATE.

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Developing More Treatments for More People, More Quickly

Identifying and Testing Potential Therapies Faster: One potential strategy against SARS-CoV-2, the novel coronavirus behind the disease COVID-19 and a worldwide pandemic, is to use old drugs in new ways. This approach of drug repurposing can cut the time it takes to develop FDA-approved drugs from as long as 10 to 15 years to just one to two years.

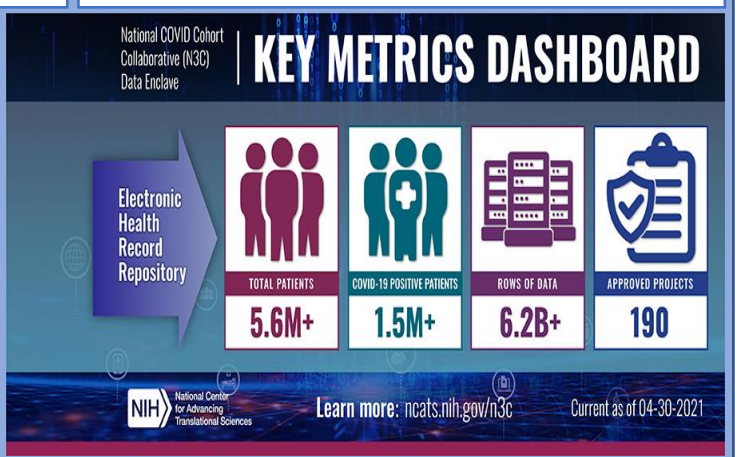
- NCATS created a research resource, the **OpenData Portal**, to openly share COVID-19-related drug repurposing data and experiments. It built the portal by using SARS-CoV-2-related assays to screen over 10,000 compounds, including nearly 3,000 approved drugs in the **NCATS Pharmaceutical Collection**, for their activity against the virus.

Improving the Conduct of Clinical Trials: Clinical trials often struggle to recruit participants, leading to costly delays and even, in some cases, failure of a trial.

- The **Clinical and Translational Science Awards (CTSA) Program** and **Trial Innovation Network (TIN)** are supporting the expansion of two randomized placebo-controlled clinical trials to test convalescent plasma as a treatment in adults hospitalized with COVID-19. Trial investigators leveraged these NCATS-funded resources to add enrollment sites and recruit participants, including those from communities disproportionately affected by the pandemic.

Focusing on the Patient: Partnering and engaging with patients and communities is crucial, and NCATS looks for opportunities to include their perspectives in research efforts.

- For the millions of people living with a rare disease, COVID-19 presents challenges -- from reduced access to medical care to heightened anxiety and stress. The **Rare Diseases Clinical Research Network (RDCRN)** surveyed the rare diseases community to assess the impact of the pandemic on individuals with rare diseases, their families and their caregivers, better understand their needs, and inform future research efforts.
- NCATS is an active partner in the NIH **Community Engagement Alliance (CEAL)** Against COVID-19 Disparities to facilitate the inclusion and participation of African Americans, Hispanic/Latinos, American Indians and other groups in vaccine and therapeutic clinical trials. Several CEAL efforts have leveraged community engagement expertise and resources from NCATS' CTSA Program.



Making Data Accessible to Support Research:

- **The National COVID Cohort Collaborative (N3C)** quickly built a centralized national data enclave and analytics platform to systematically collect clinical, laboratory, and diagnostic data on COVID-19 treated patients. With over 70 participating institutions, including more than 40 CTSA Program hubs, the data enclave contains information from over 3.7 million patient records, which have been harmonized to facilitate data analysis and speed COVID-19 research. NCATS is the steward of the data, overseeing access and myriad data protections.